

*brussels was never destroyed by the wars,
but rather by its own people*

leopold II - besme plan
1866



The earthworks during the construction of the palais of justice (+- 1870)

Brussels archives (2022)

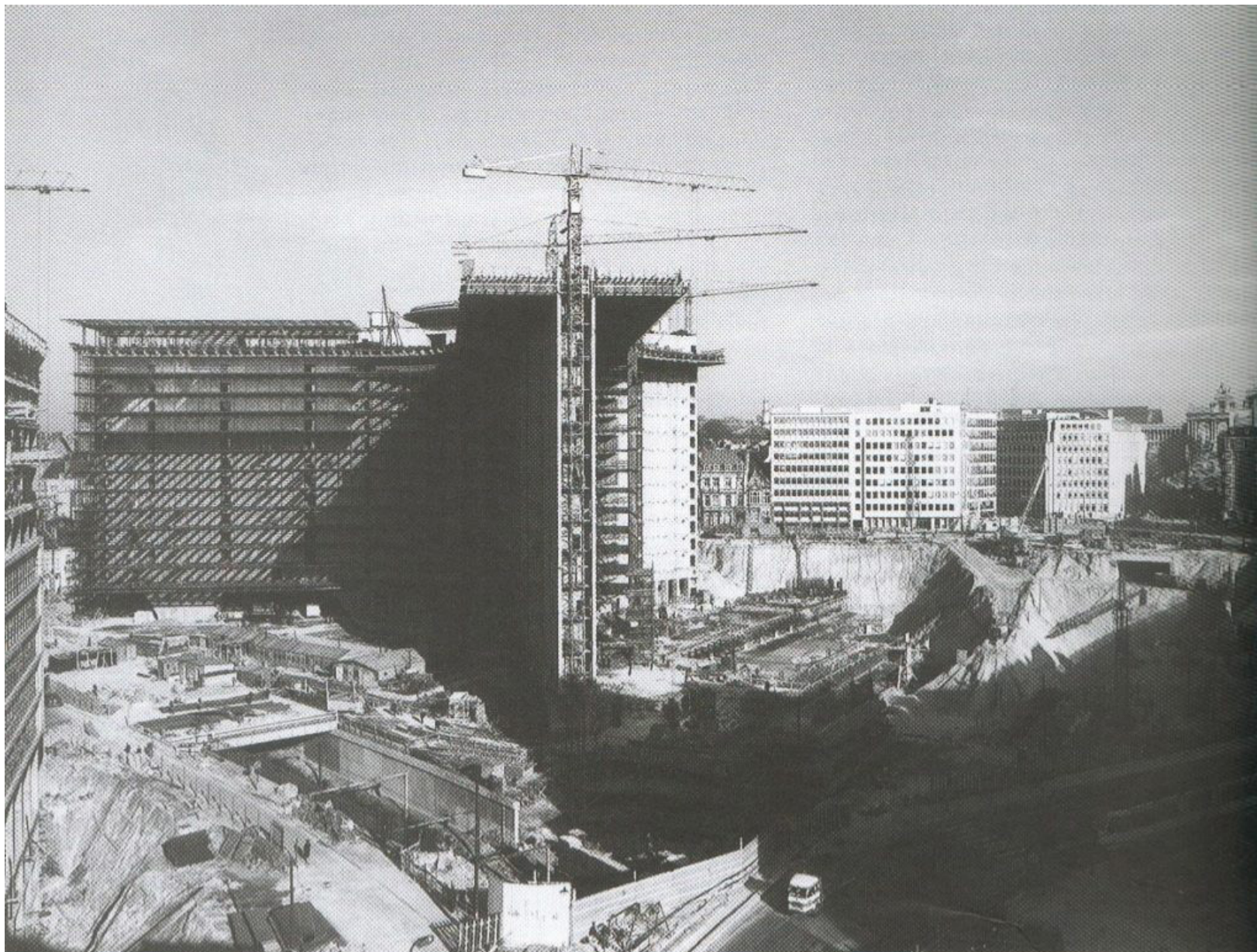
manhattan project
1967



Destruction of Noordwijk neighbourhood.

Brussels archives (2022)

european quarter
1971



construction of the Barlaymont
building (1968)

the production of terrain vague
European Quarter, 2022



by author (2022)

defining terrain vague

ambiguity as the foundation for coexistence in the European quarter in Brussels

What leads to the construction of terrain vague?

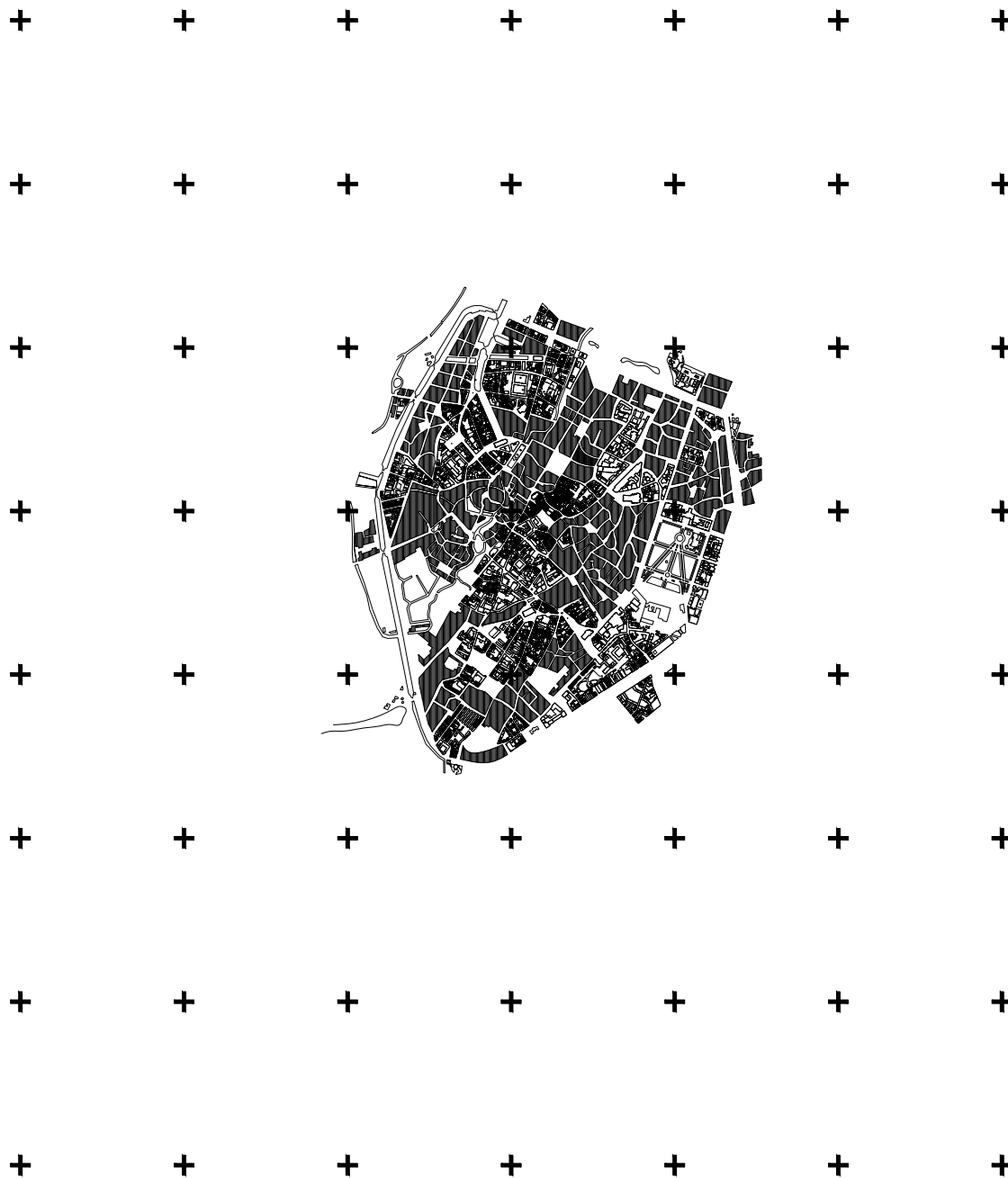
How can ambiguity, seen within terrain vague, figure as an identity for a common ground in brussels?

How can terrain vague become an alternative productive ground for brussels?

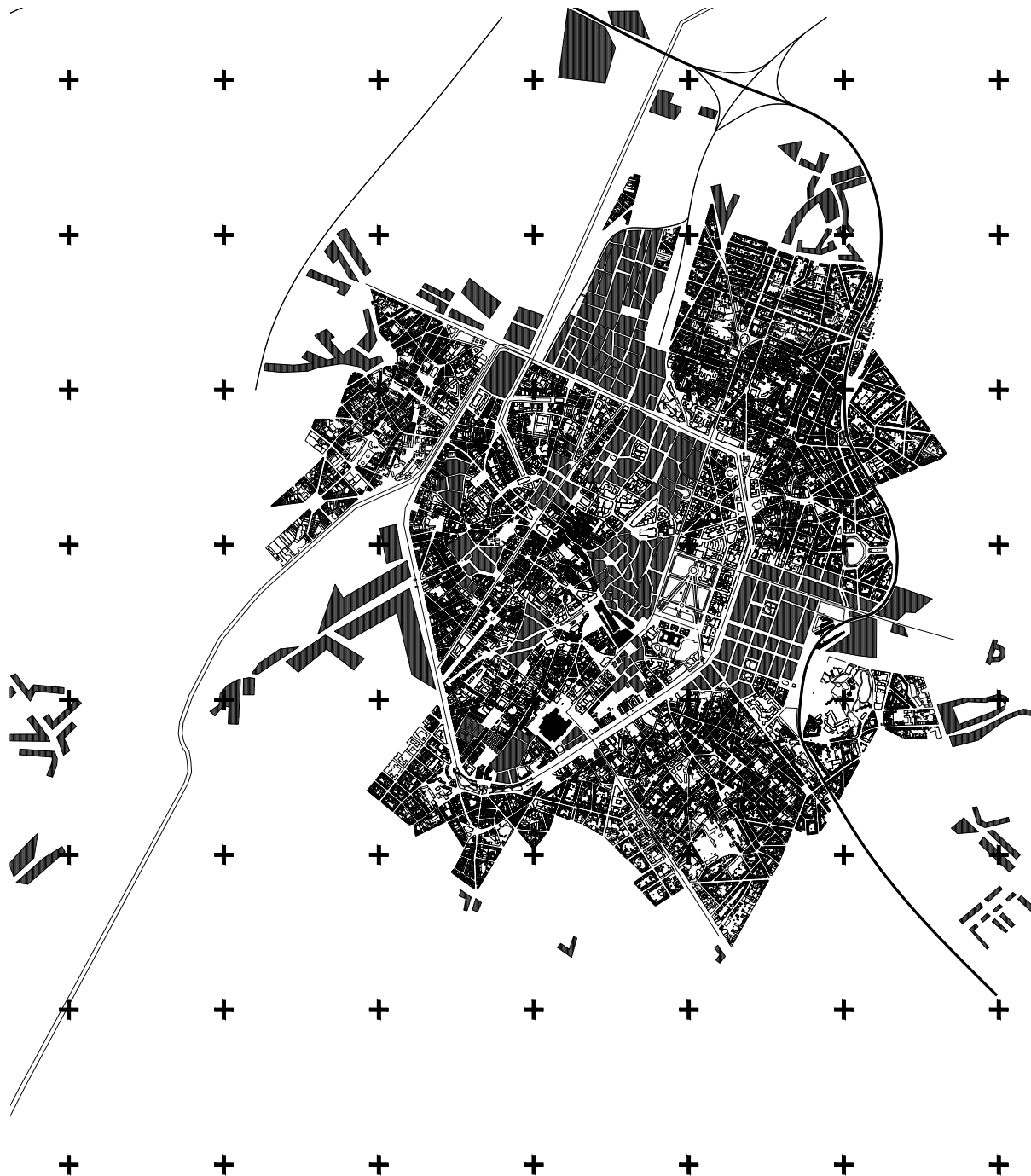
constructing brussels
in three chapters of brutal urban interventions

baseline measurement

1 km x 1 km grid
hatch: demolished buildings
outlines: existing buildings



brussels
1837



Manhattan plan (2)/ EU quarter (3)

1 km x 1 km grid
hatch: demolished buildings
outlines: existing buildings



Manhattan project

EU quarter

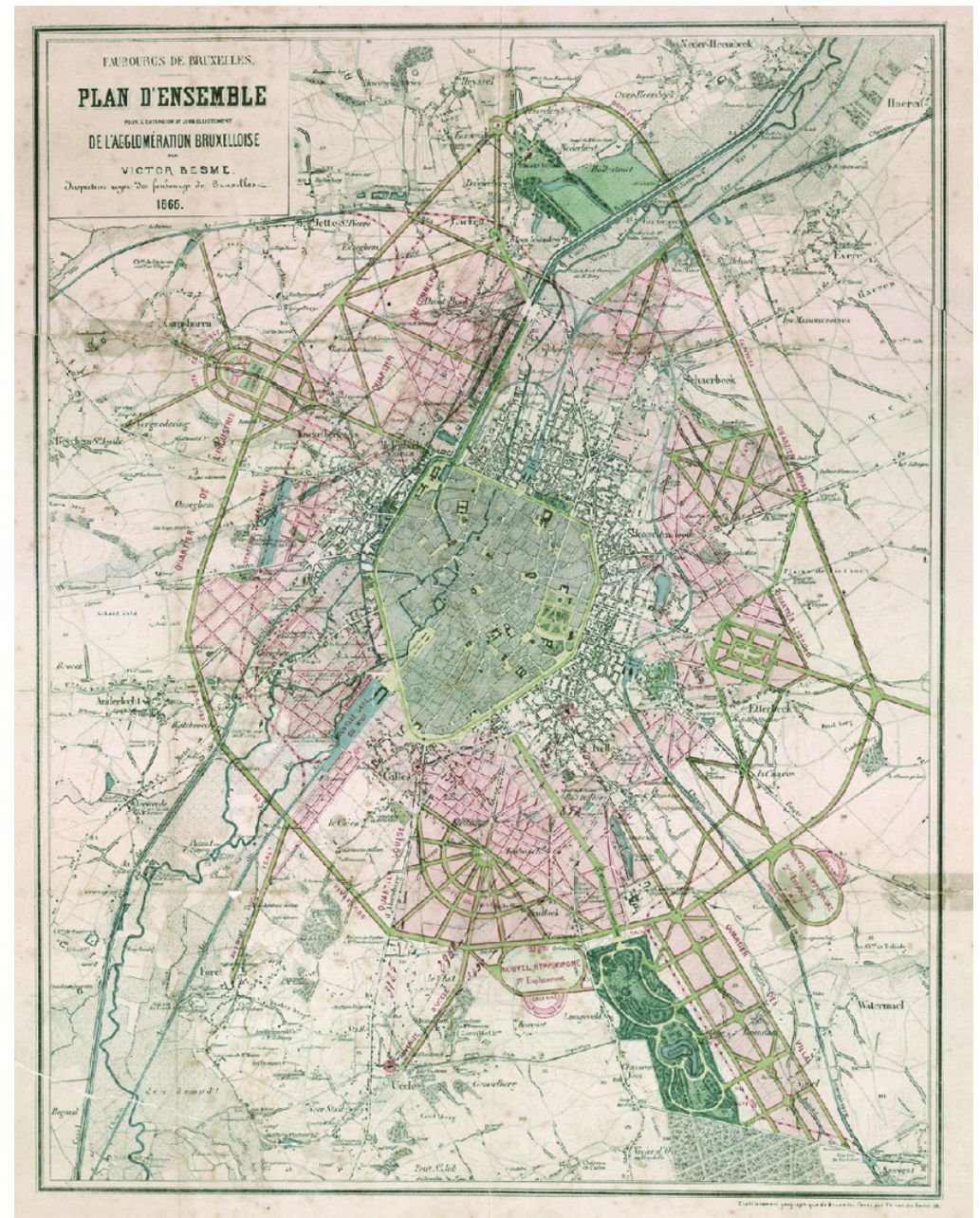
brussels
1960

Brussels today



1 km x 1 km grid
outlines: existing buildings

leopold II - besme plan
1866



Plan d'ensemble pour l'extension et
l'embellissement de la ville de Bruxelles,
Victor Besme (1866)

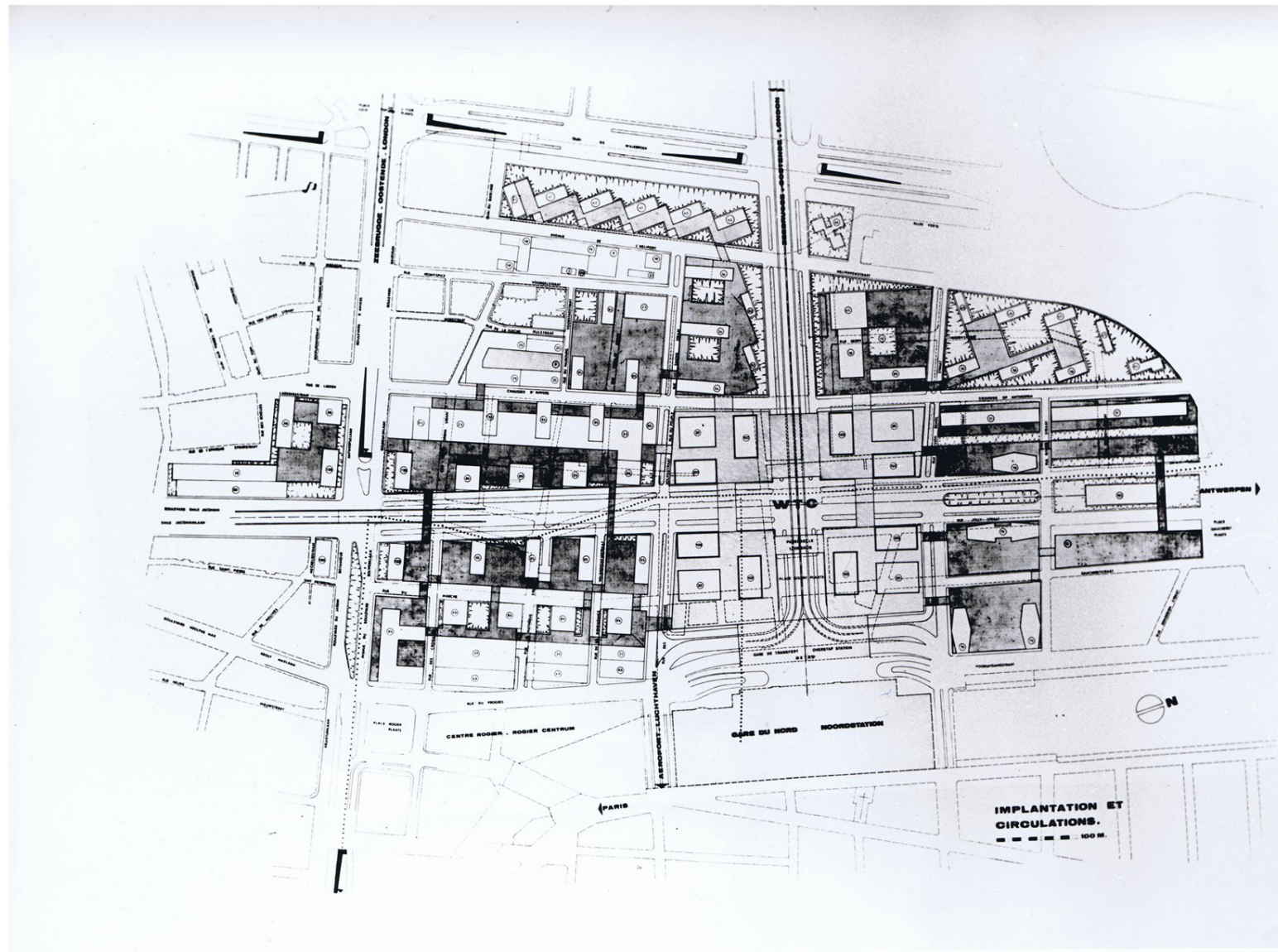
leopold II - besme plan
1866



A perspective of the palais of justice

Brussels archives (2022)

manhattan project
1967



Plan Manhattan, group structures
(1964)

Brussels archives (2022)

manhattan project
1967



A view of the manhattan project, 1980's.

Brussels archives (2022)

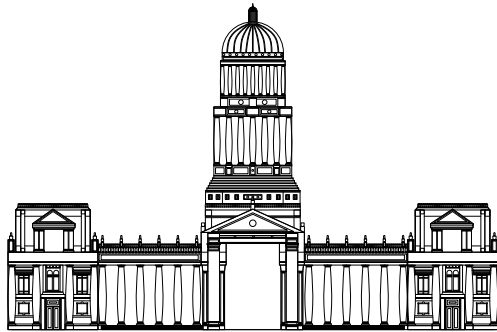
european quarter
1971

Paul Henri Spaak building in its urban
context.

by author (2022)

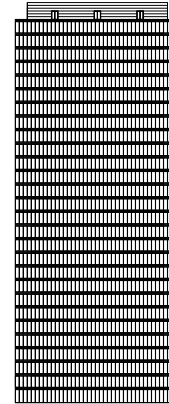


timeline of brutal urban projections



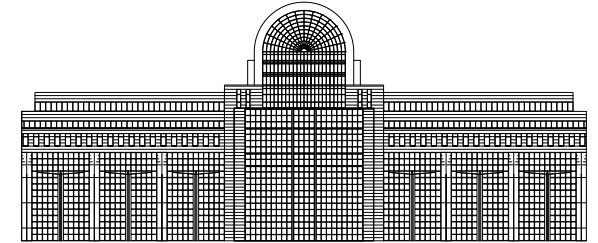
1883

Palace of Justice
Supreme court of Belgium



1972

World trade center
Business center



1993

Paul Henri Spaak building
European Parliament

1870

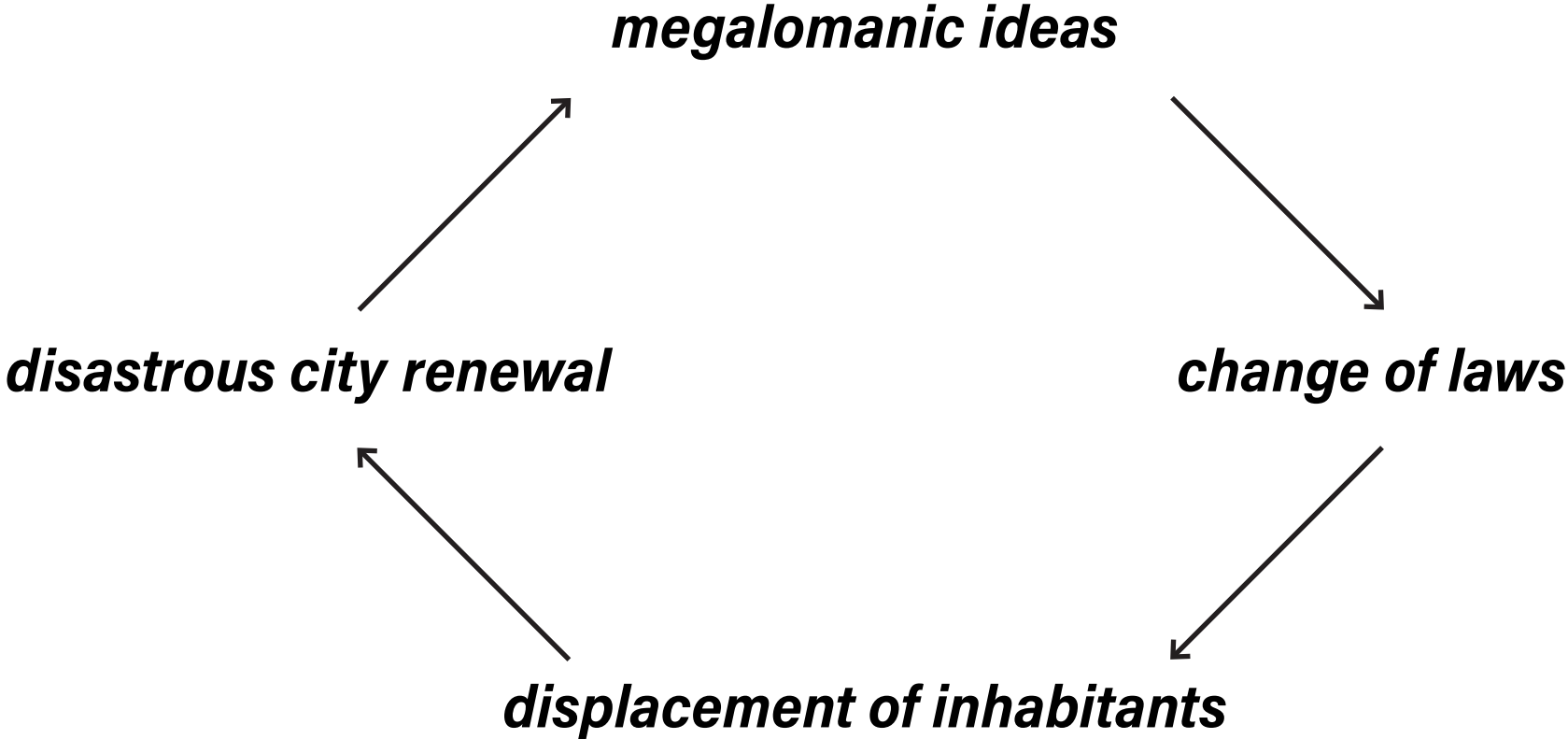
Leopold II plan
Cultural capital of Europe
Aesthetics and order

1960

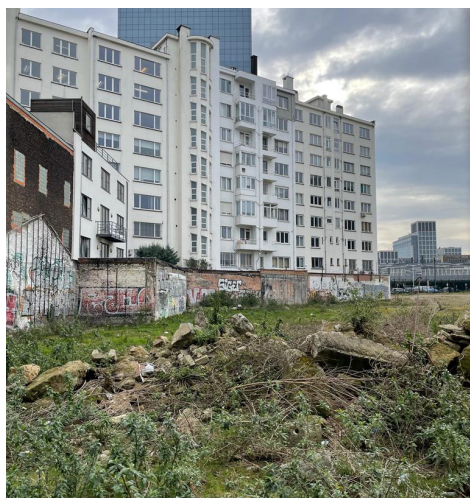
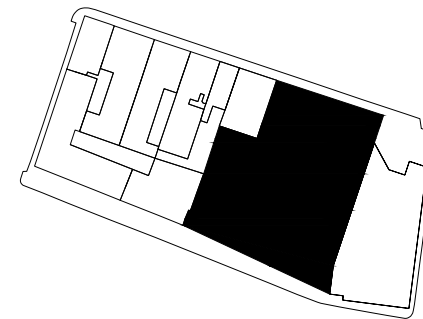
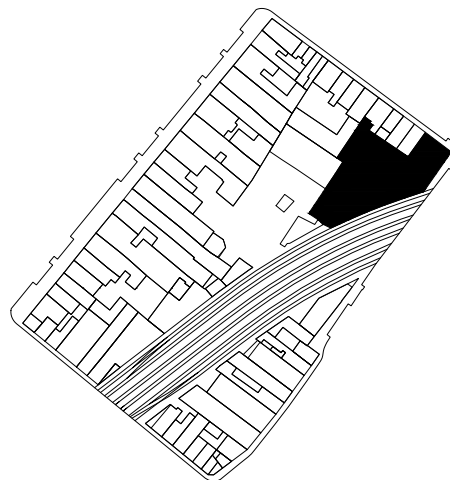
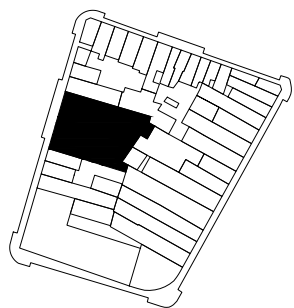
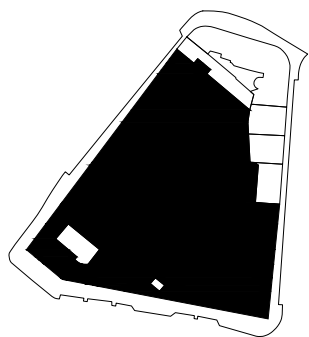
Manhattan plan
International Business capital of
Europa

1970

European Quarter
Political capital of Europe
International businesses



understanding of terrain vague



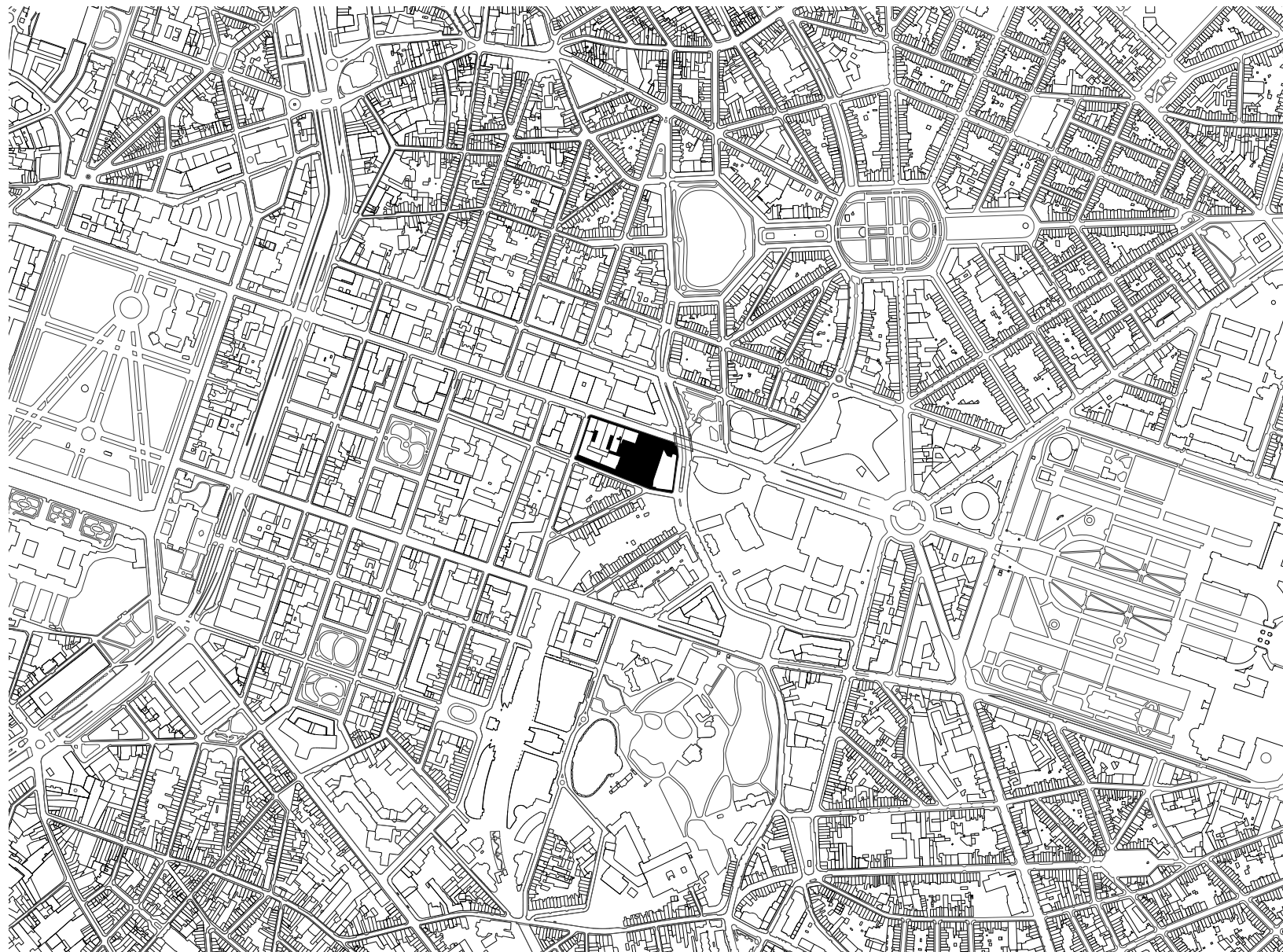
50°50'17.8"N 4°20'07.6"E
Barastraat, Anderlecht

50°51'43.4"N 4°21'48.8"E
Aarschotstraat, Schaarbeek

50°50'46.4"N 4°20'24.2"E
Zennestraat, Annessenswijk

50°50'36.1"N 4°22'37.9"E
Wetstraat, Europese wijk

project location



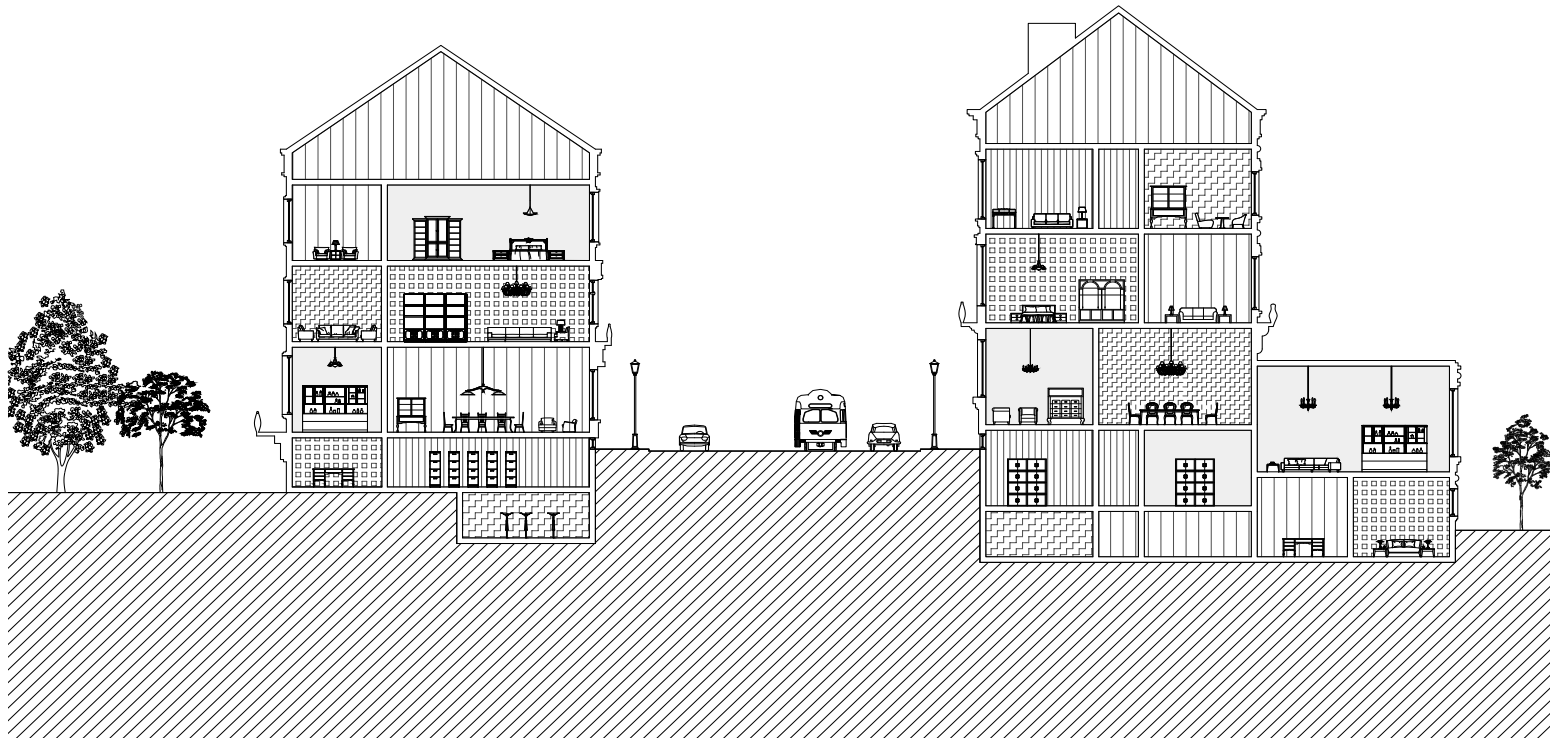
EU quarter

project location

***European parliament as a
neighbourhood eating machine***

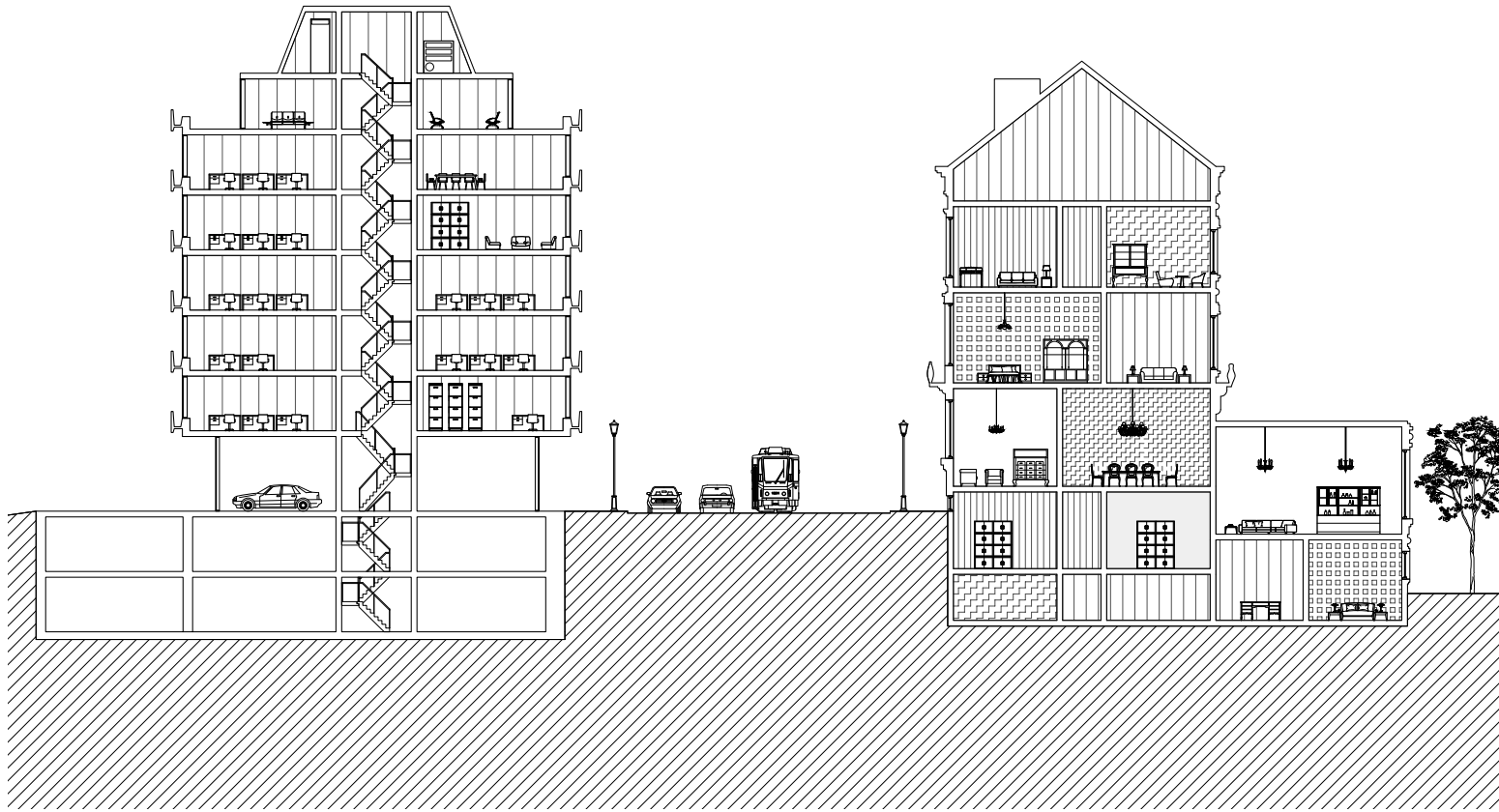
EU quarter

project location
historical understanding of the site



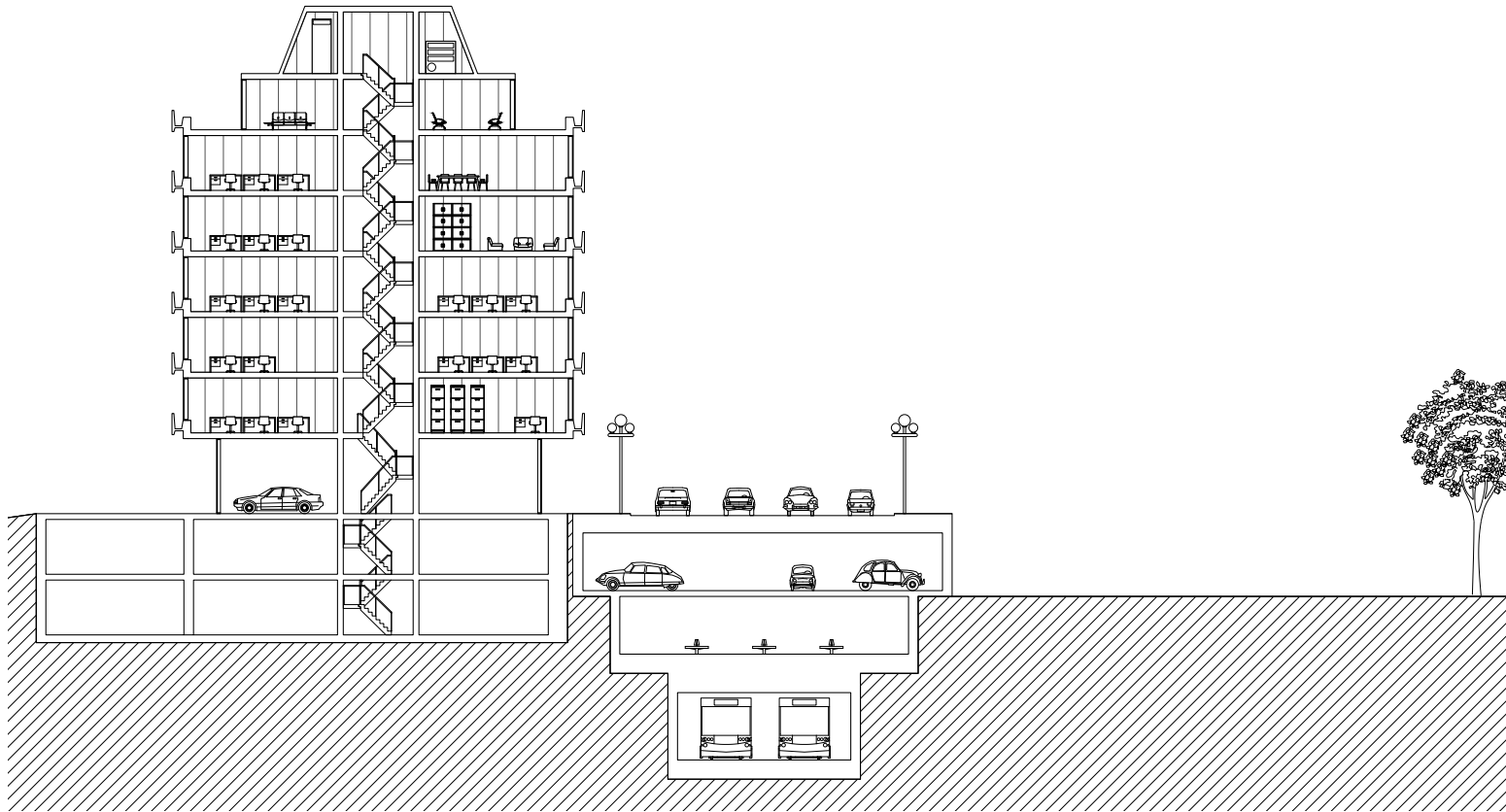
1950's

project location
historical understanding of the site



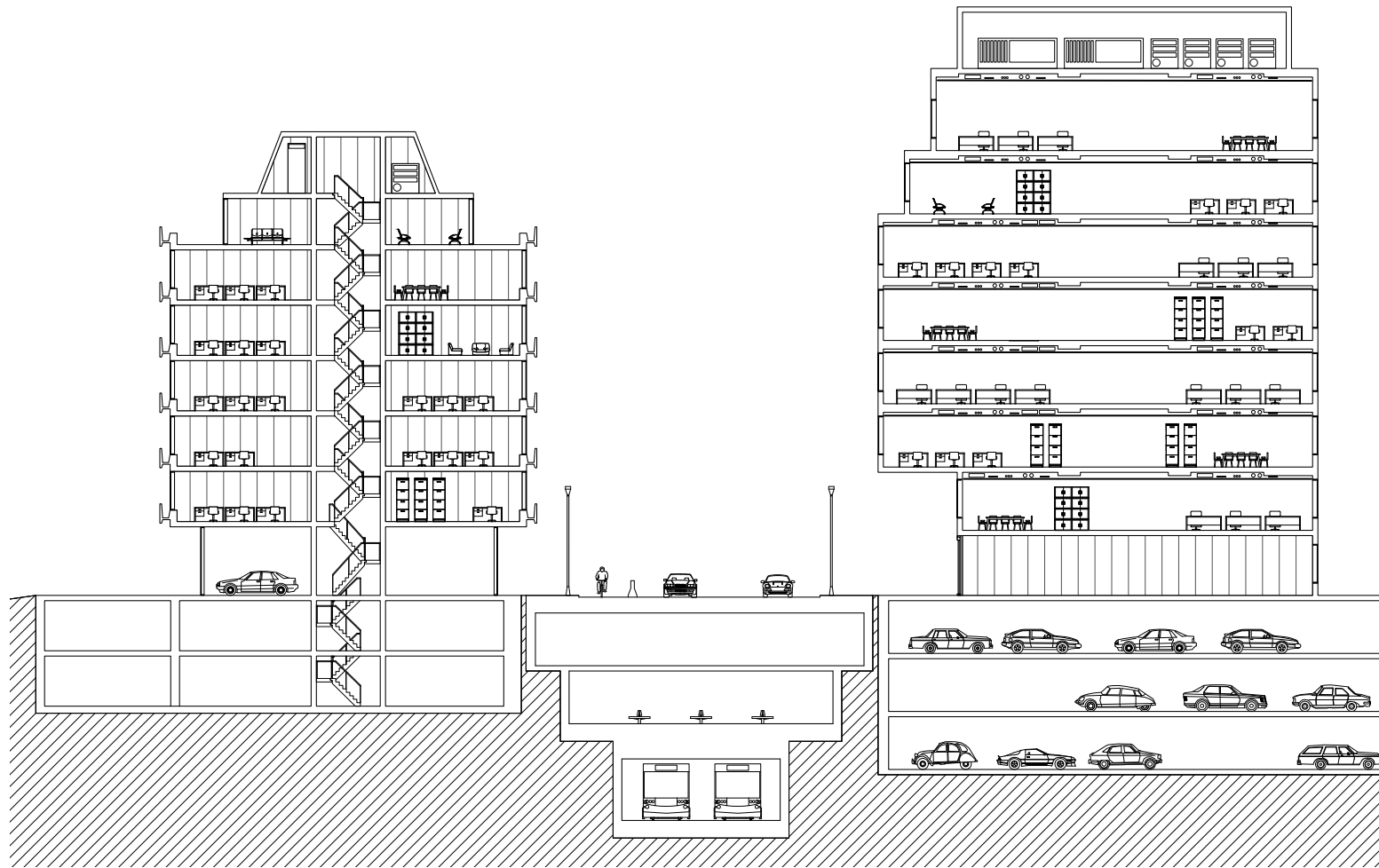
1960's

project location
historical understanding of the site



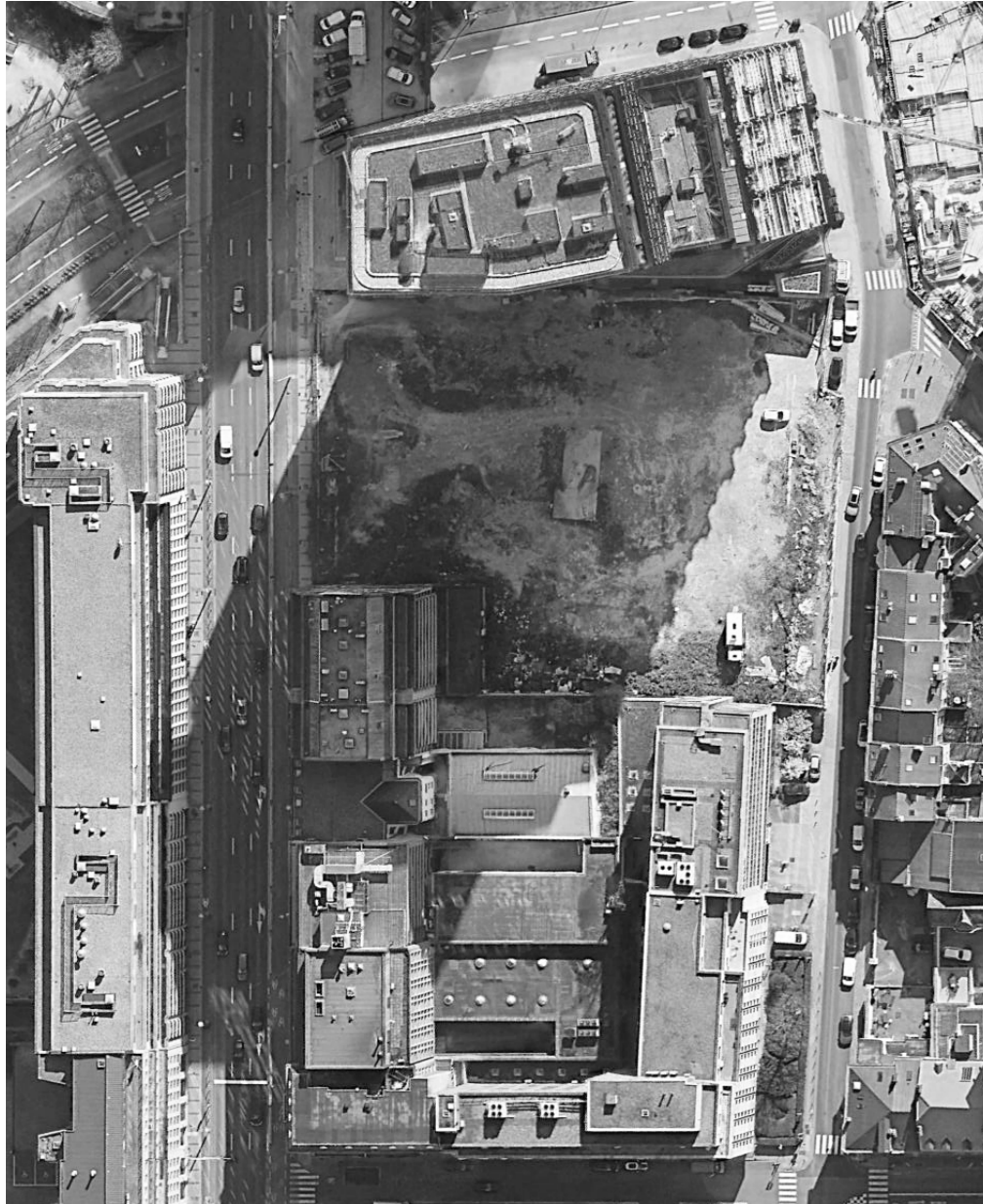
1970's

project location
historical understanding of the site



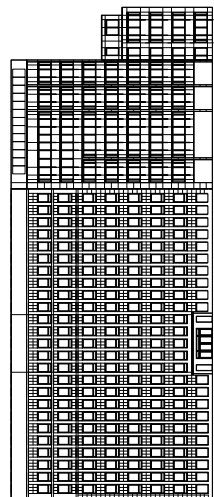
1980's/ current state

project location

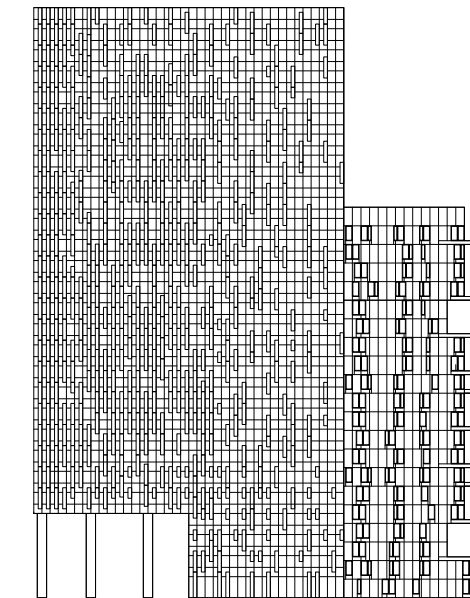
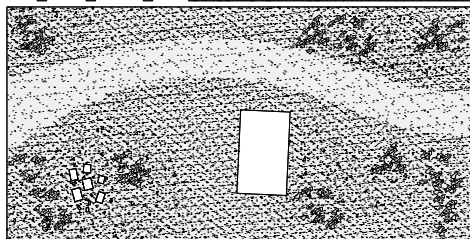


EU quarter

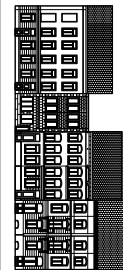
project location



wetstraat

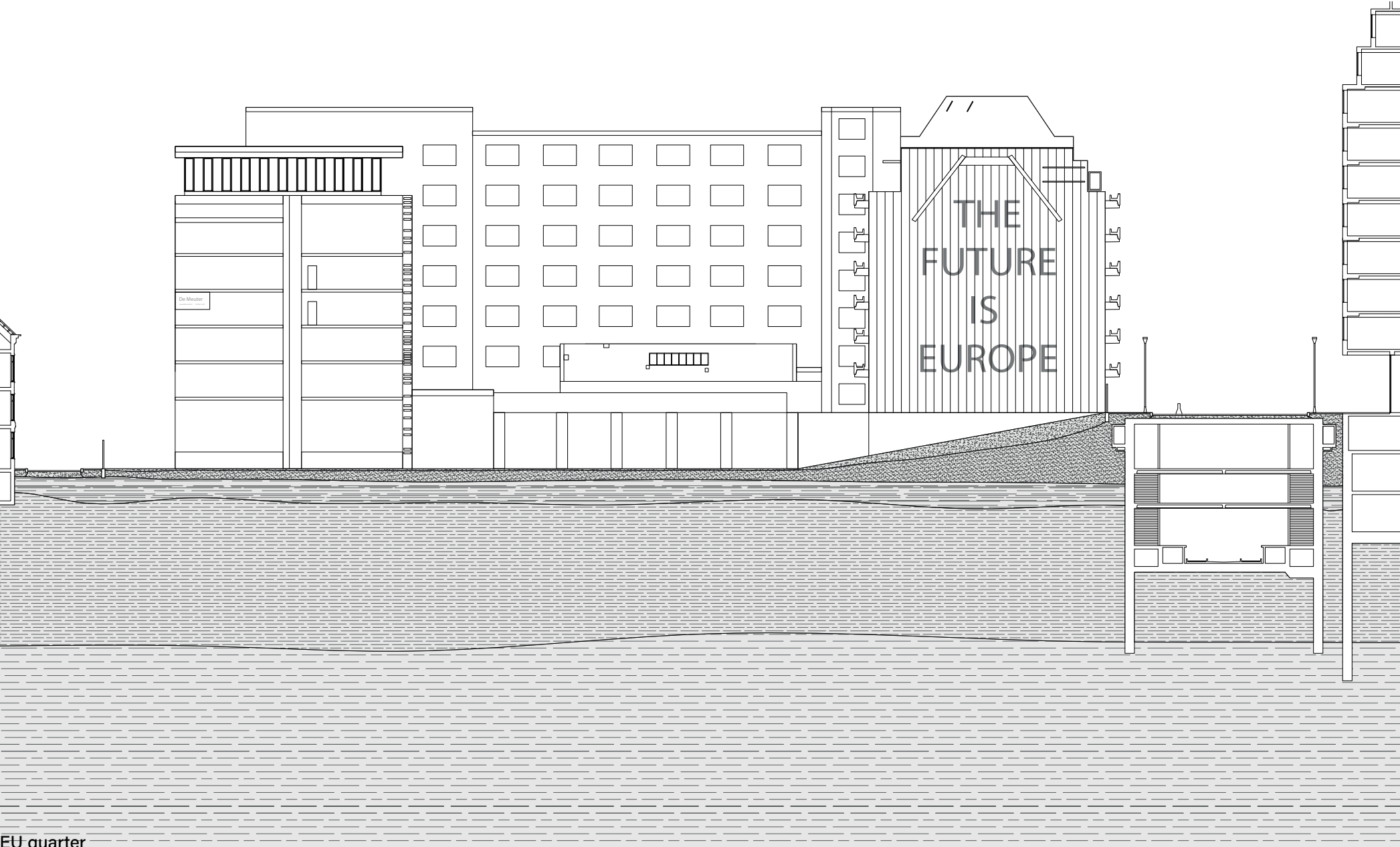


jacque de laingsstraat



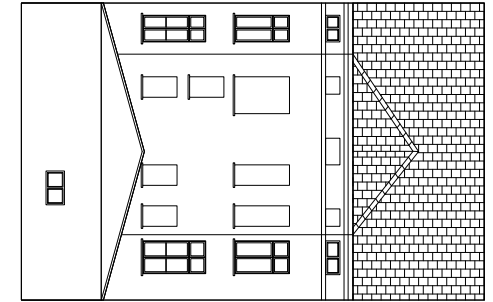
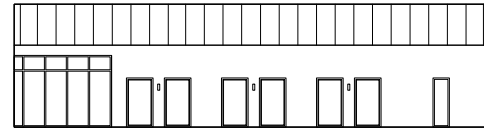
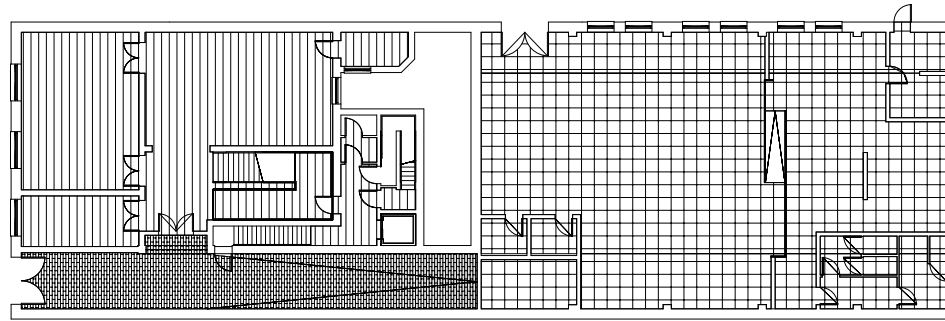
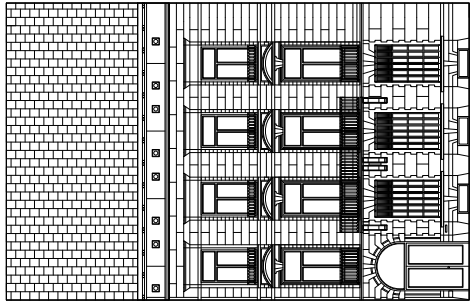
EU quarter

project location



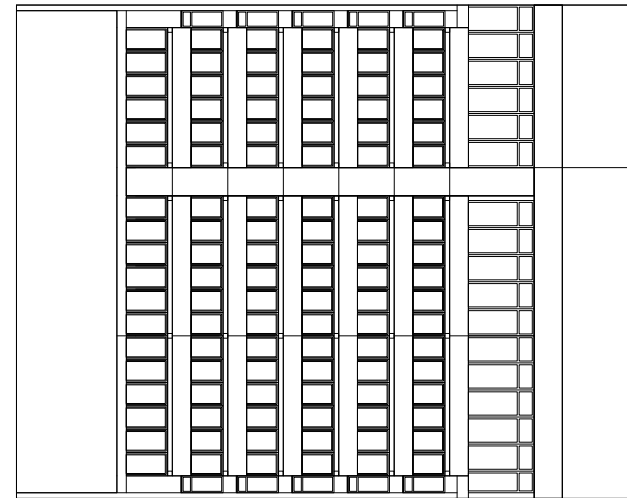
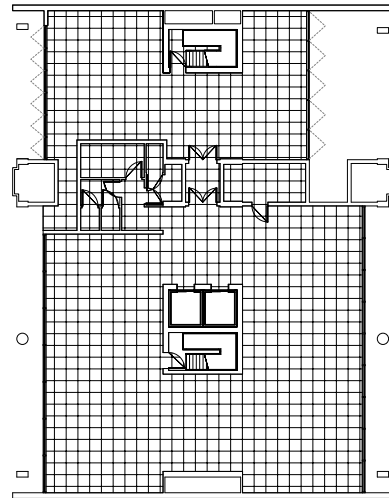
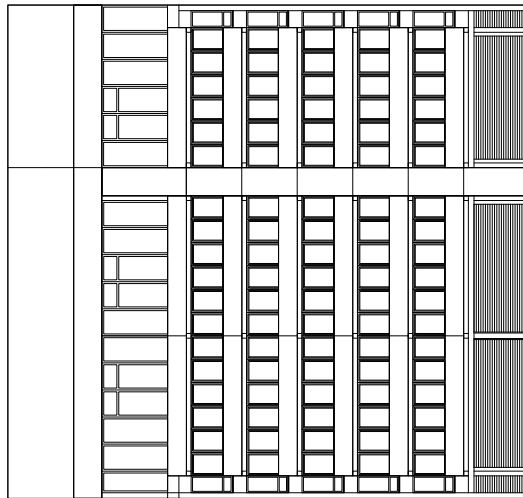
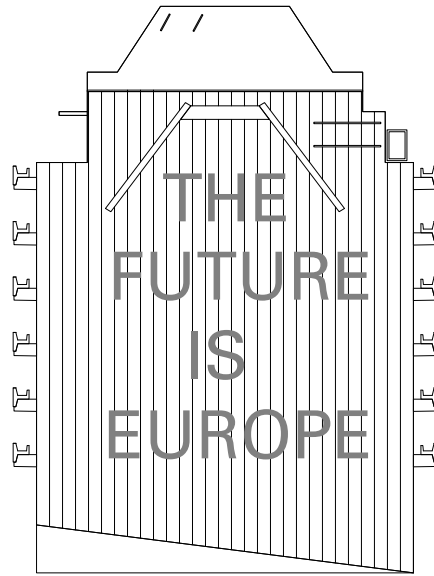
EU quarter

project location



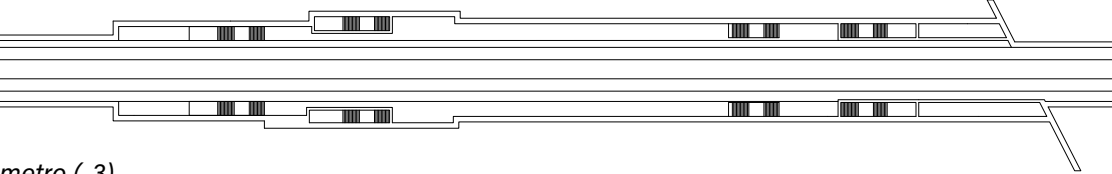
wetstraat 91

project location

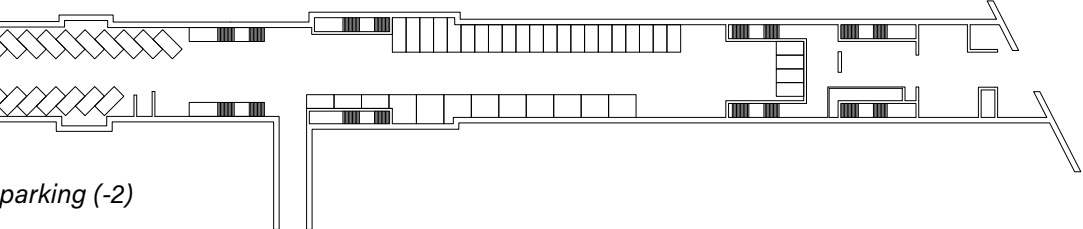


wetstraat 93-95

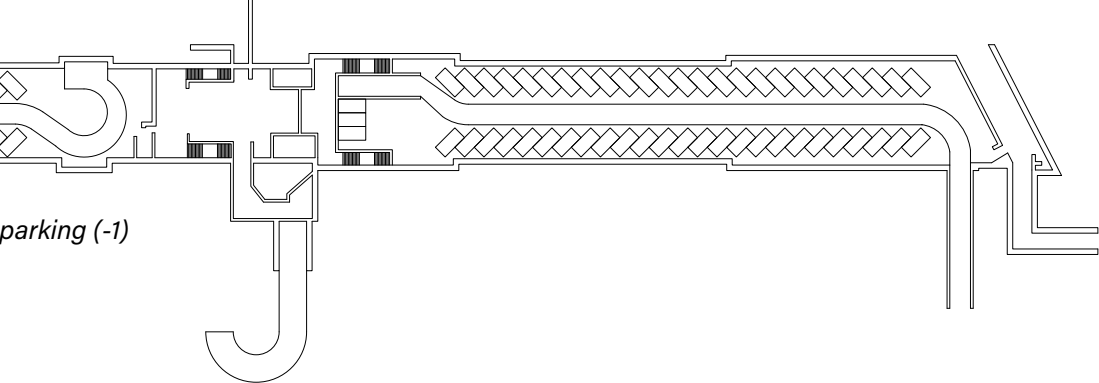
project location



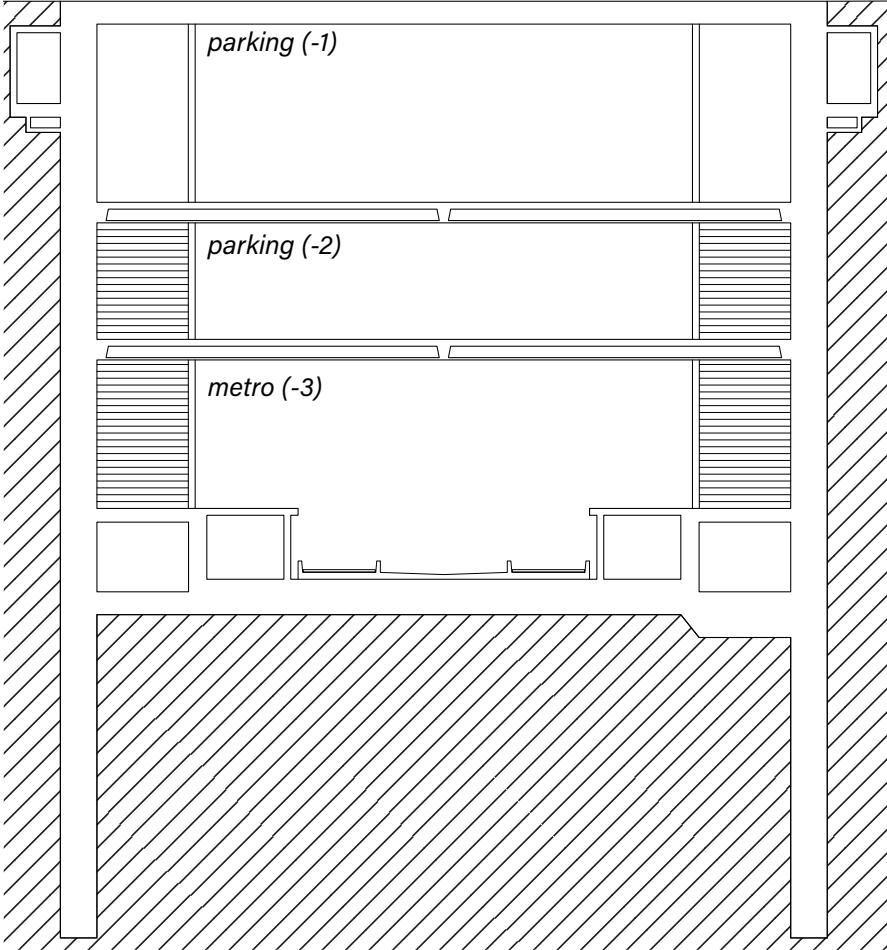
metro (-3)



parking (-2)

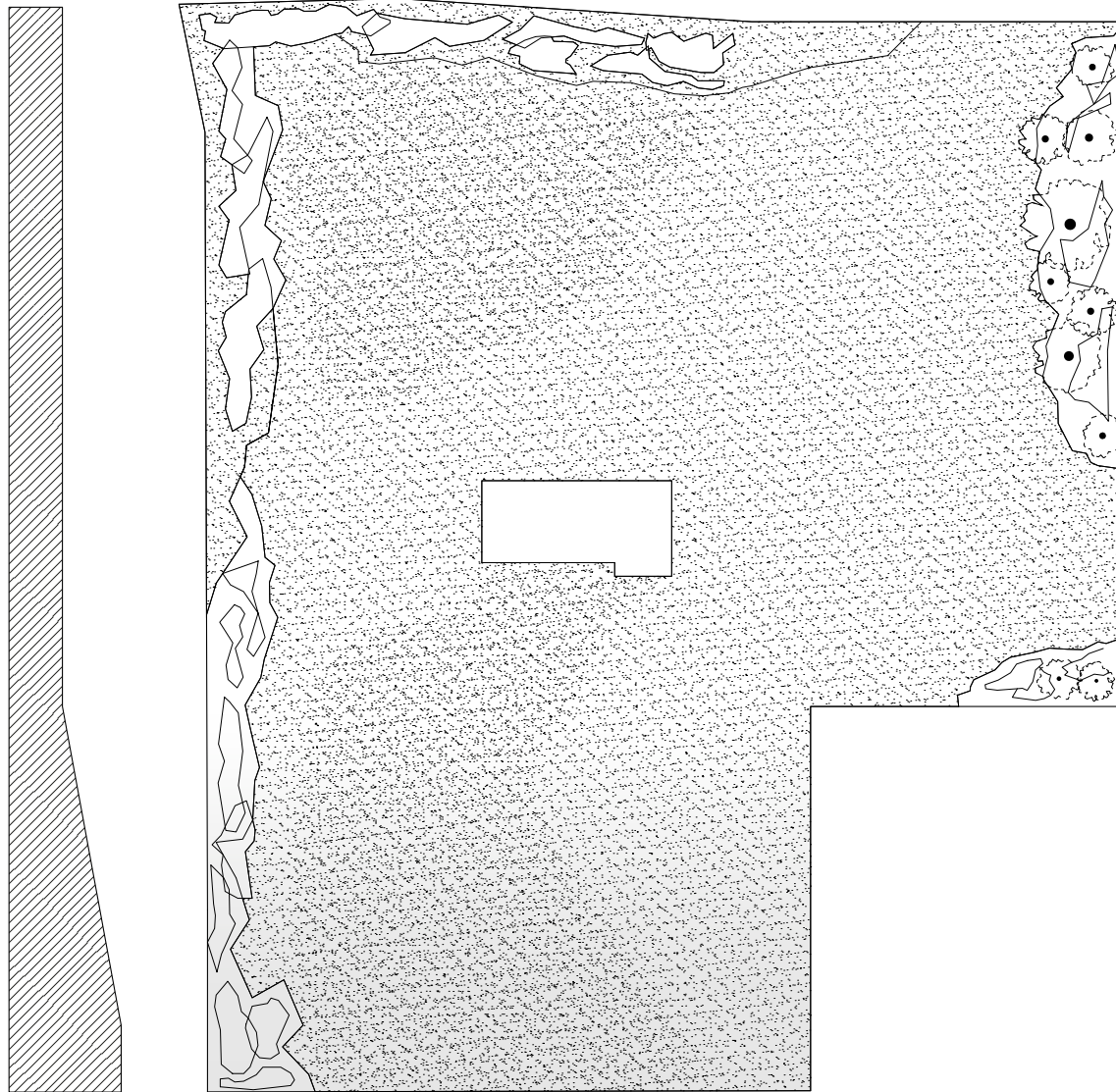


parking (-1)



parking/ metro tunnel

project location



terrain itself

project location



Butterfly Bush (Buddleja)

color: purple
flowering period: June - September
location: full sun
height: 150 - 250 centimeters



Dog trot (Glechoma hederacea)

color: green, sometimes small blue flowers.
flowering period: May-August
location: half shadow
height: 15 - 30 centimeters



Ferns (Athyriaceae)

color: green
flowering period: never
location: shadow
height: 60 - 120 centimeters



Grasses: cattail, yucca, flax grass, Mexican feathergrass

color: shades of green and yellow
flowering period: June - September, evergreens
location: half shadow - full sun
height: 30 - 80 centimeters.

terrain itself

project location

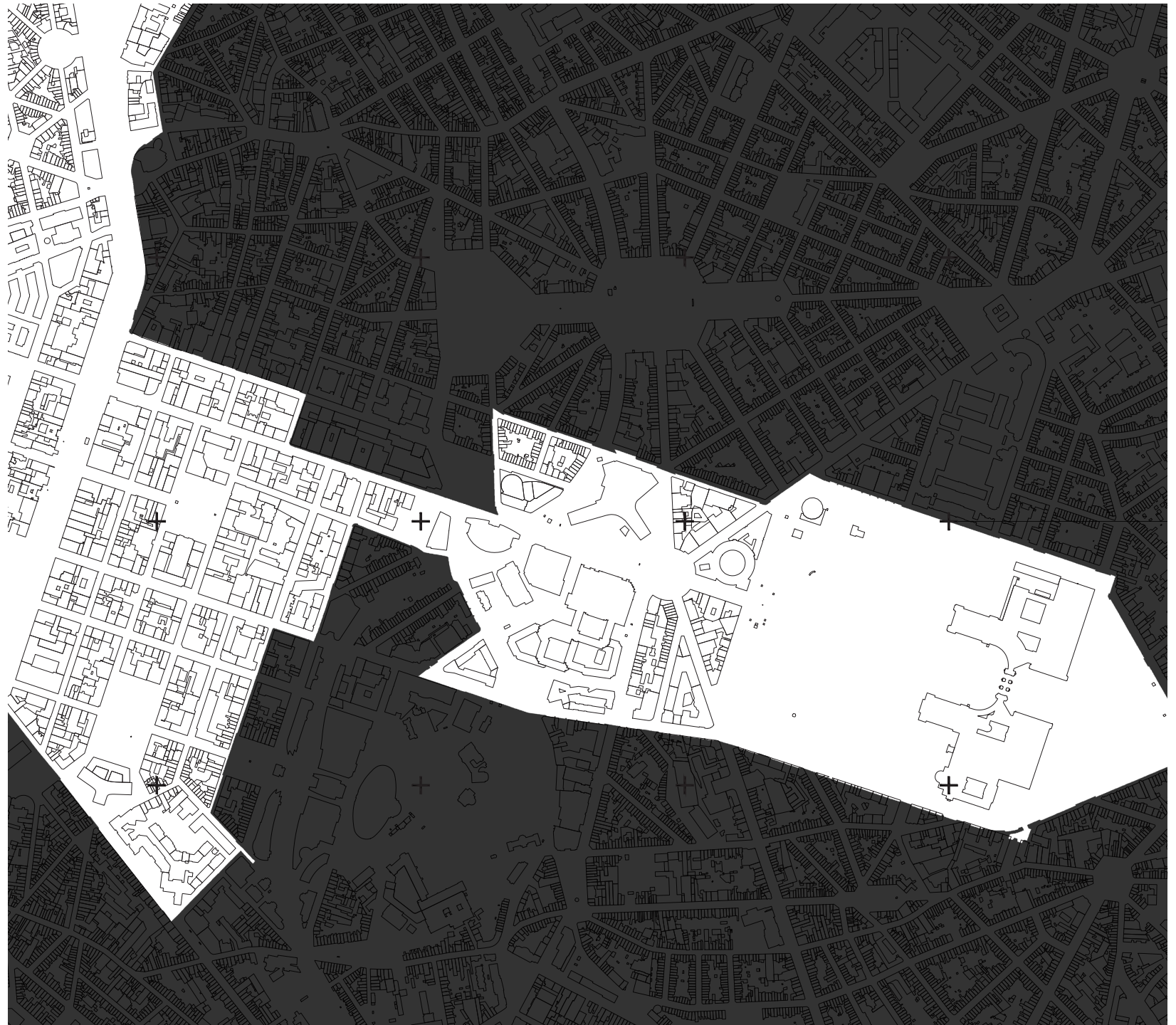
0.5 x 0.5 km grid size



EU axis

project location

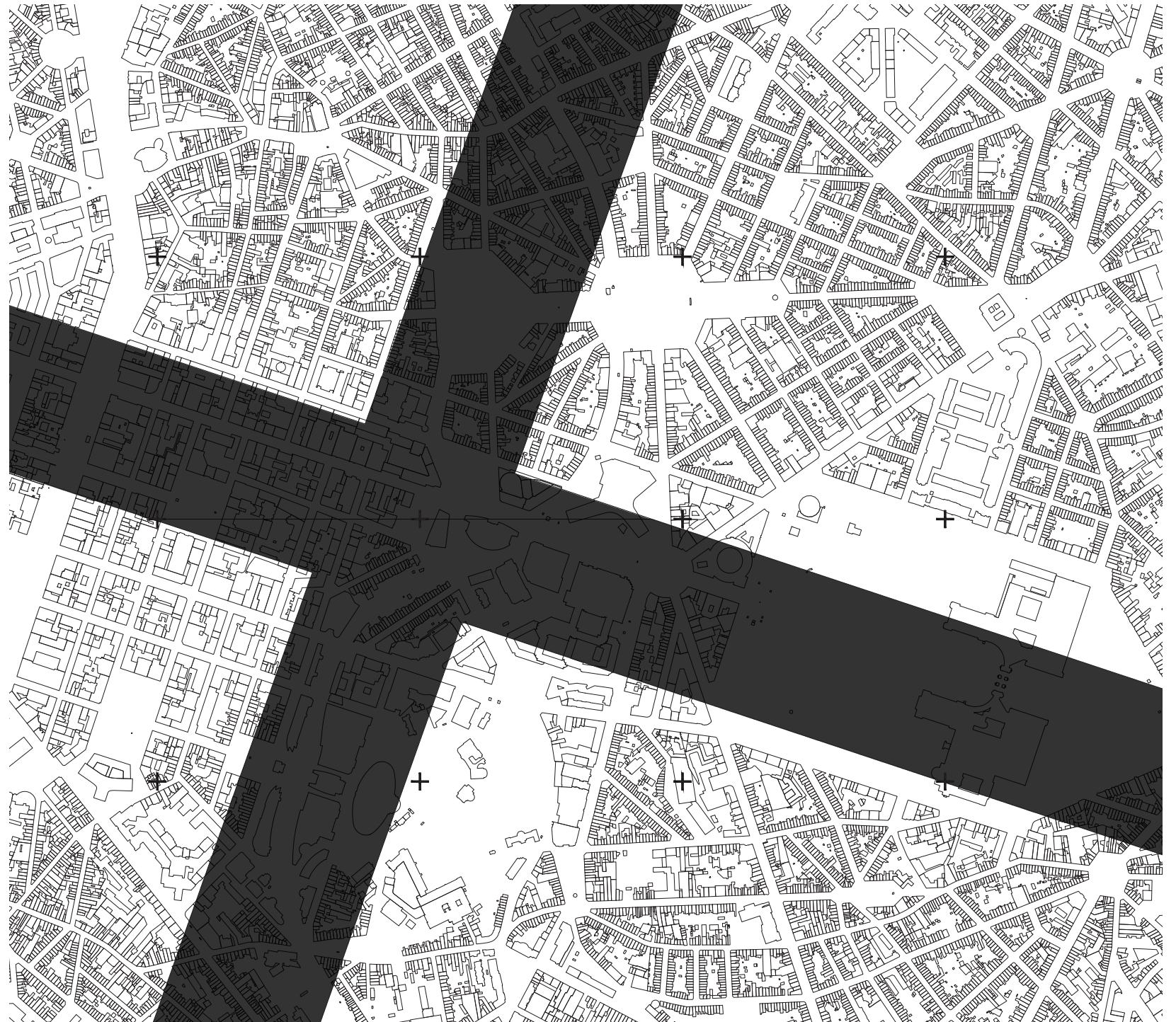
0.5 x 0.5 km grid size



domestic axis

project location

0.5 x 0.5 km grid size



the midpoint of two

Protect the ground and give it back to those who are in need.

Give space to informality but keep the ambiguous character of terrain vague.

A civic center where the local and global can coexist.

project intervention
urban scale

0.5 x 0.5 km grid size



project building

project intervention
urban scale

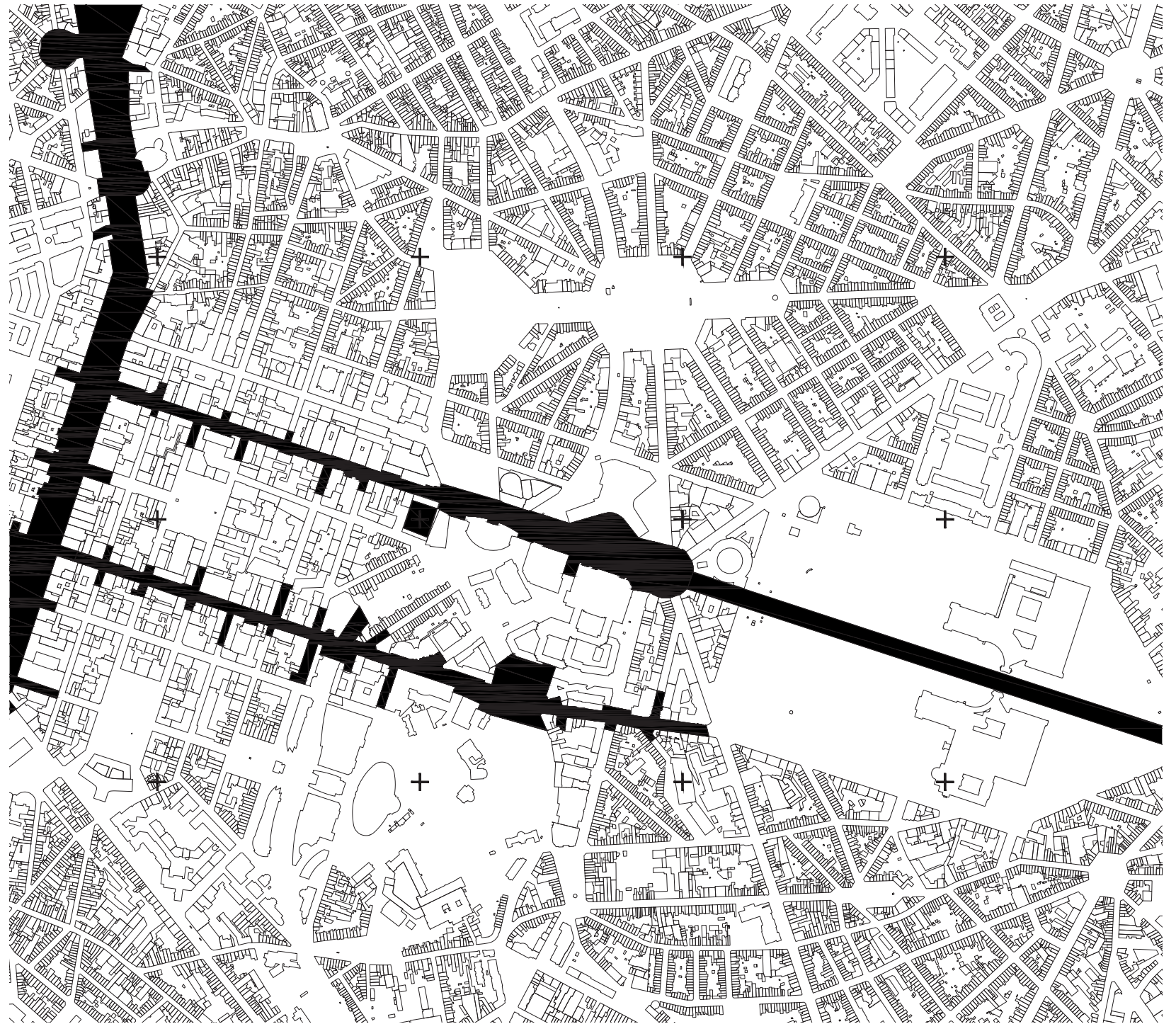
0.5 x 0.5 km grid size



a new center point

project intervention
urban scale

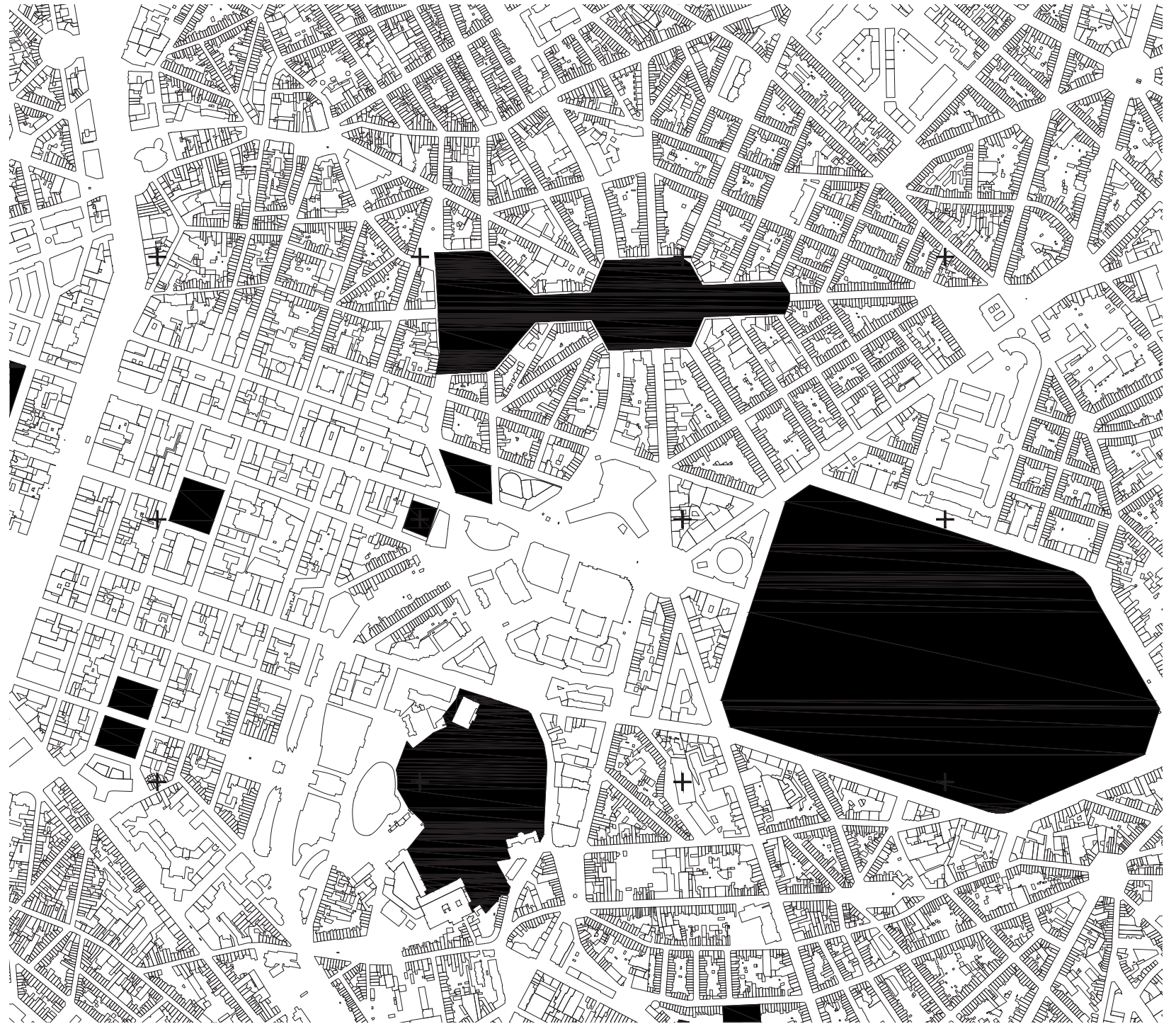
0.5 x 0.5 km grid size



boundary for noise

project intervention
urban scale

0.5 x 0.5 km grid size



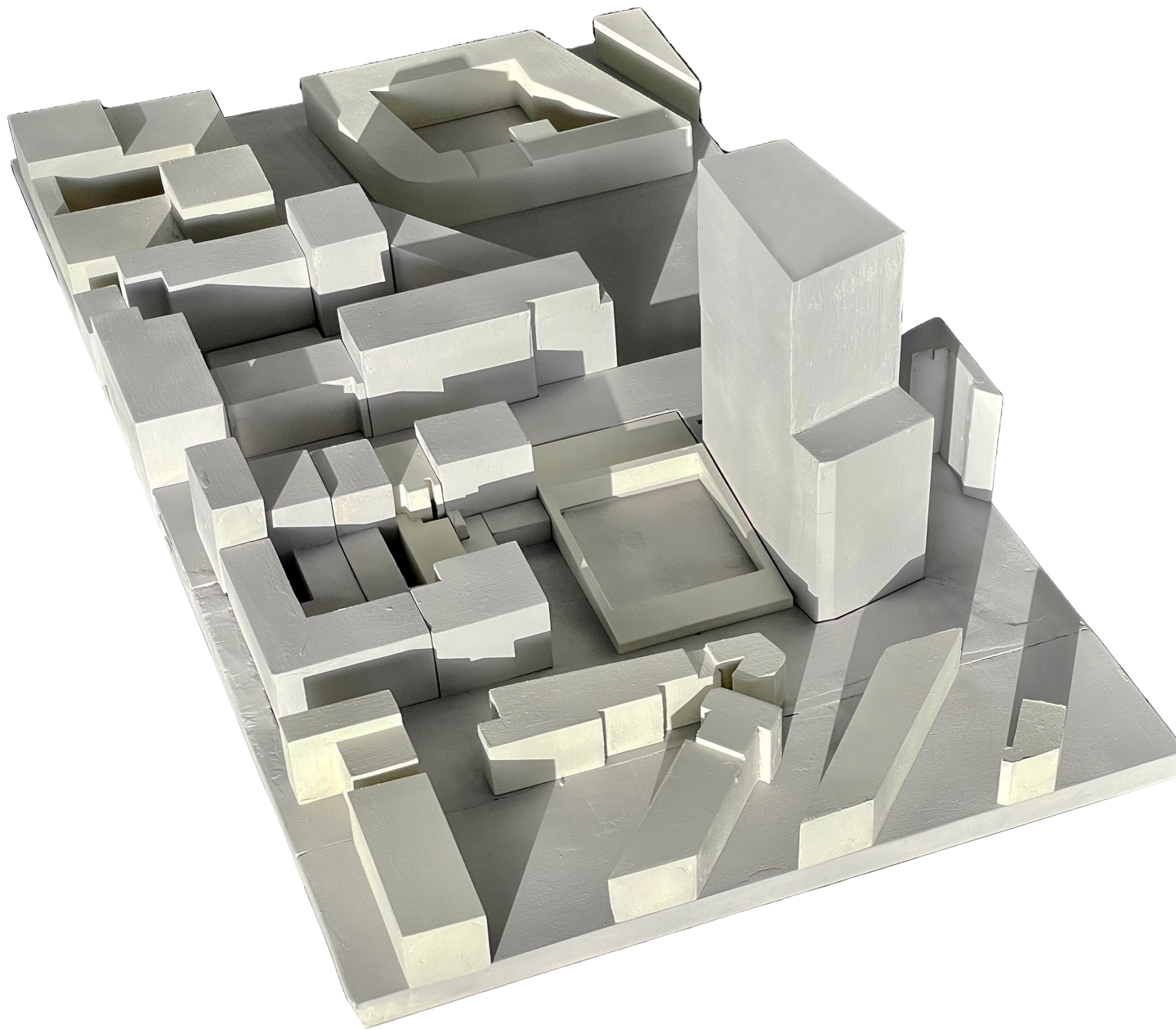
stepping stone for ecology

[a walled garden]

The walled garden gives meaning to a meaningless void. It protects the terrain and defines it as a space of possibilities.

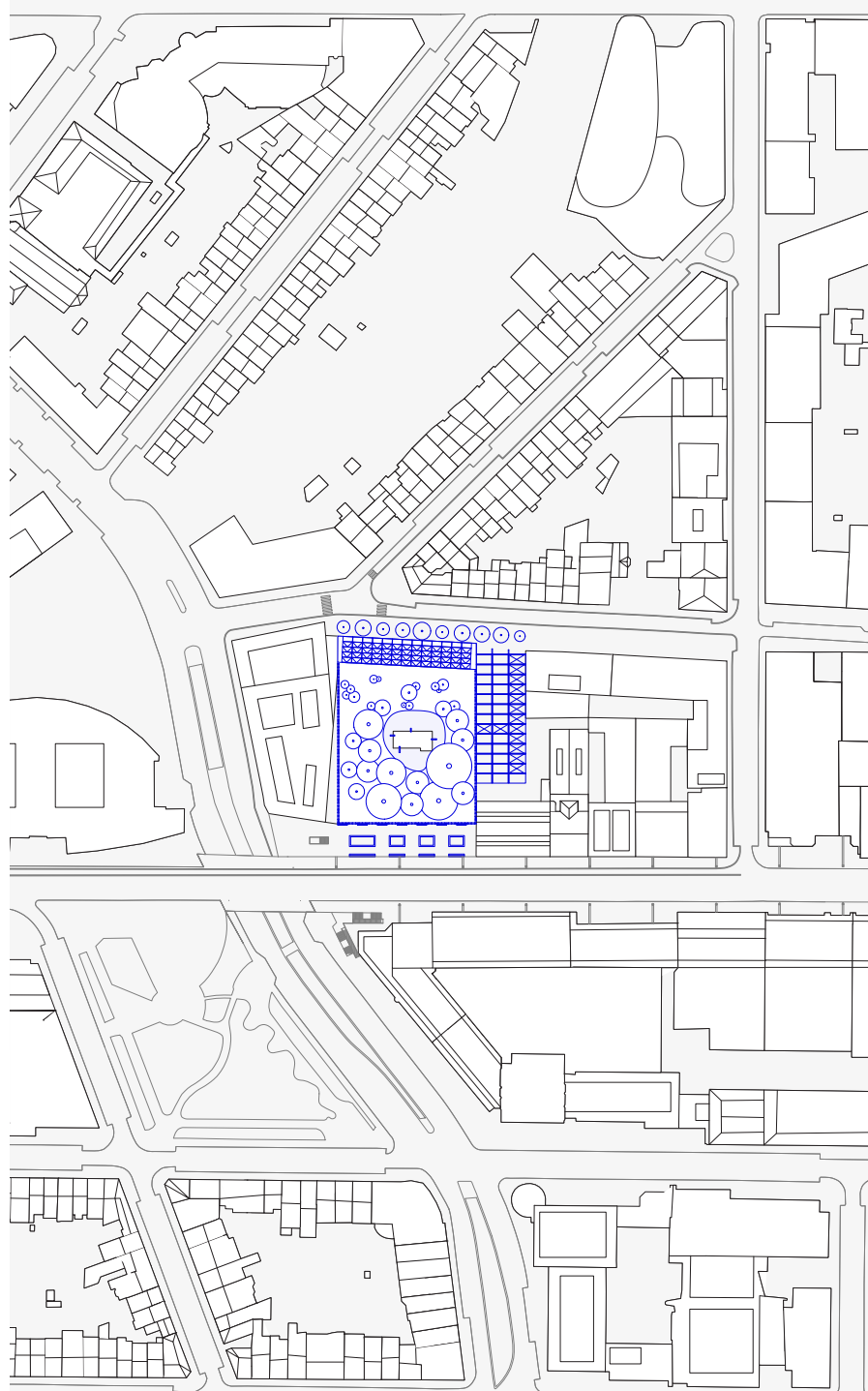


project intervention
urban scale



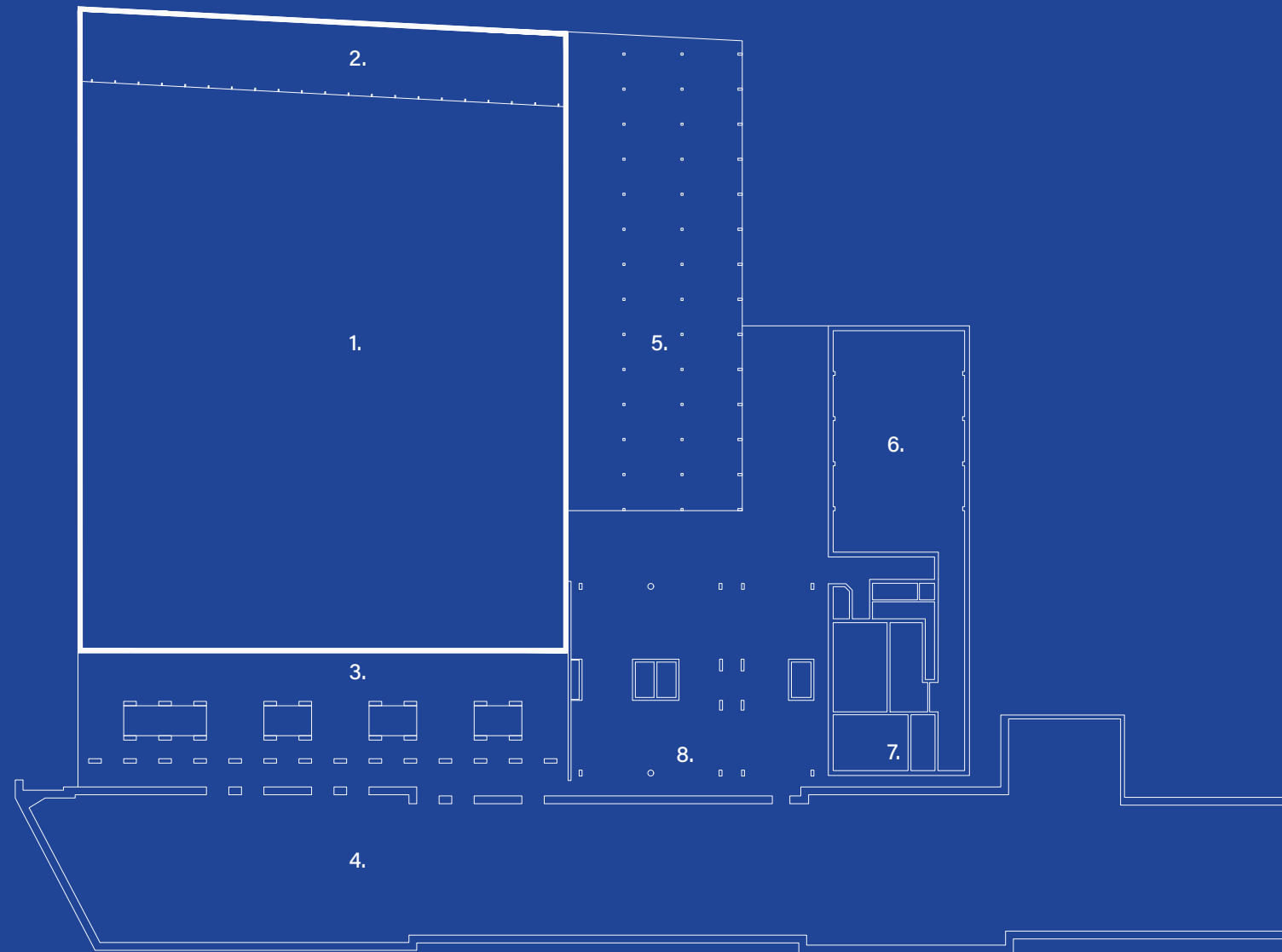
model 1.500

project intervention
urban scale



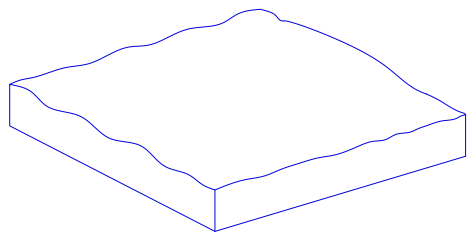
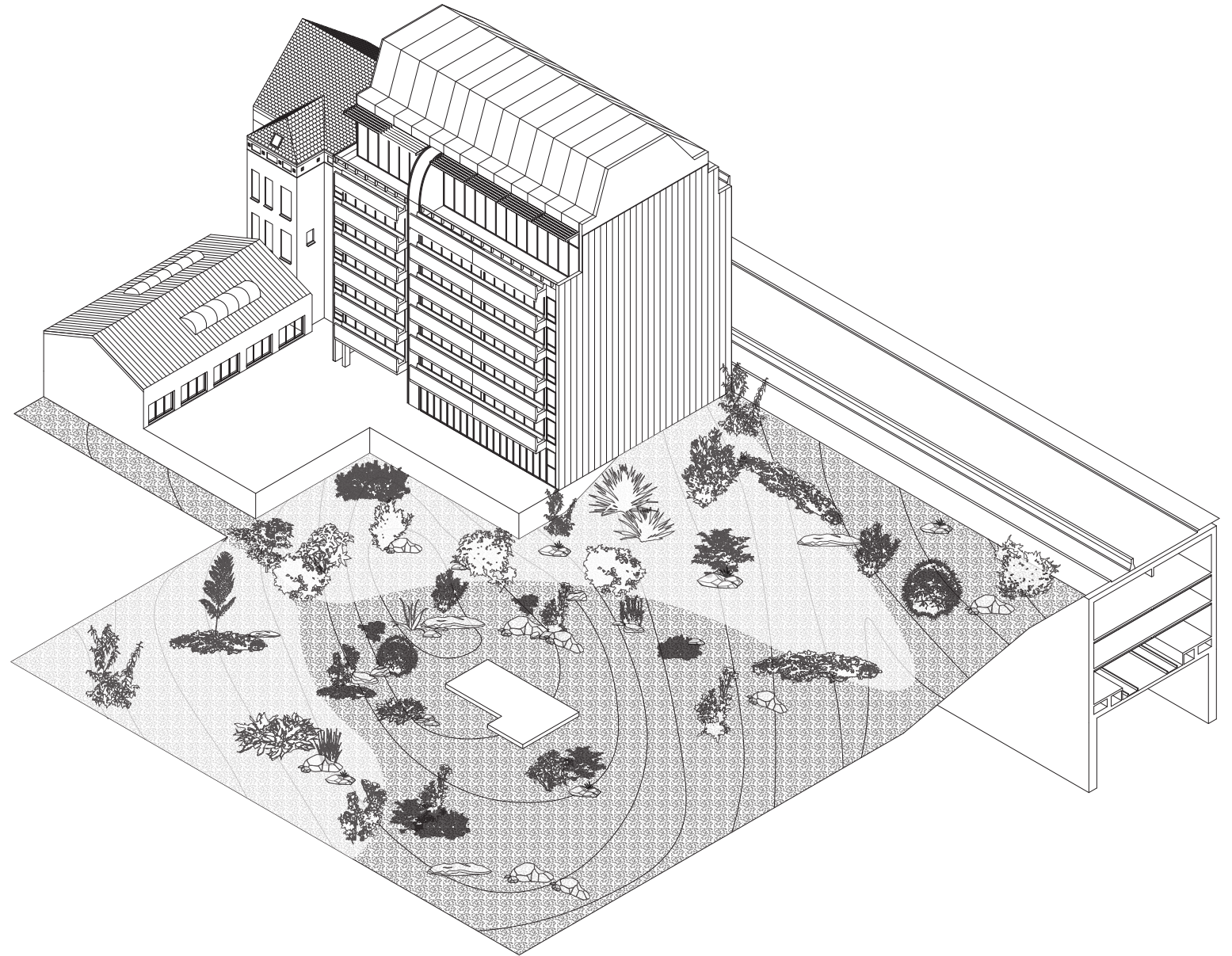
model 1.500

[a walled garden]



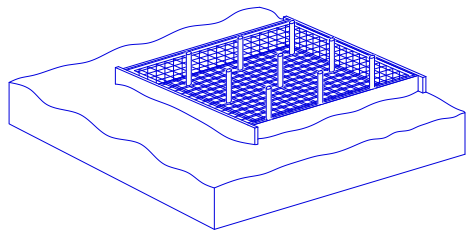
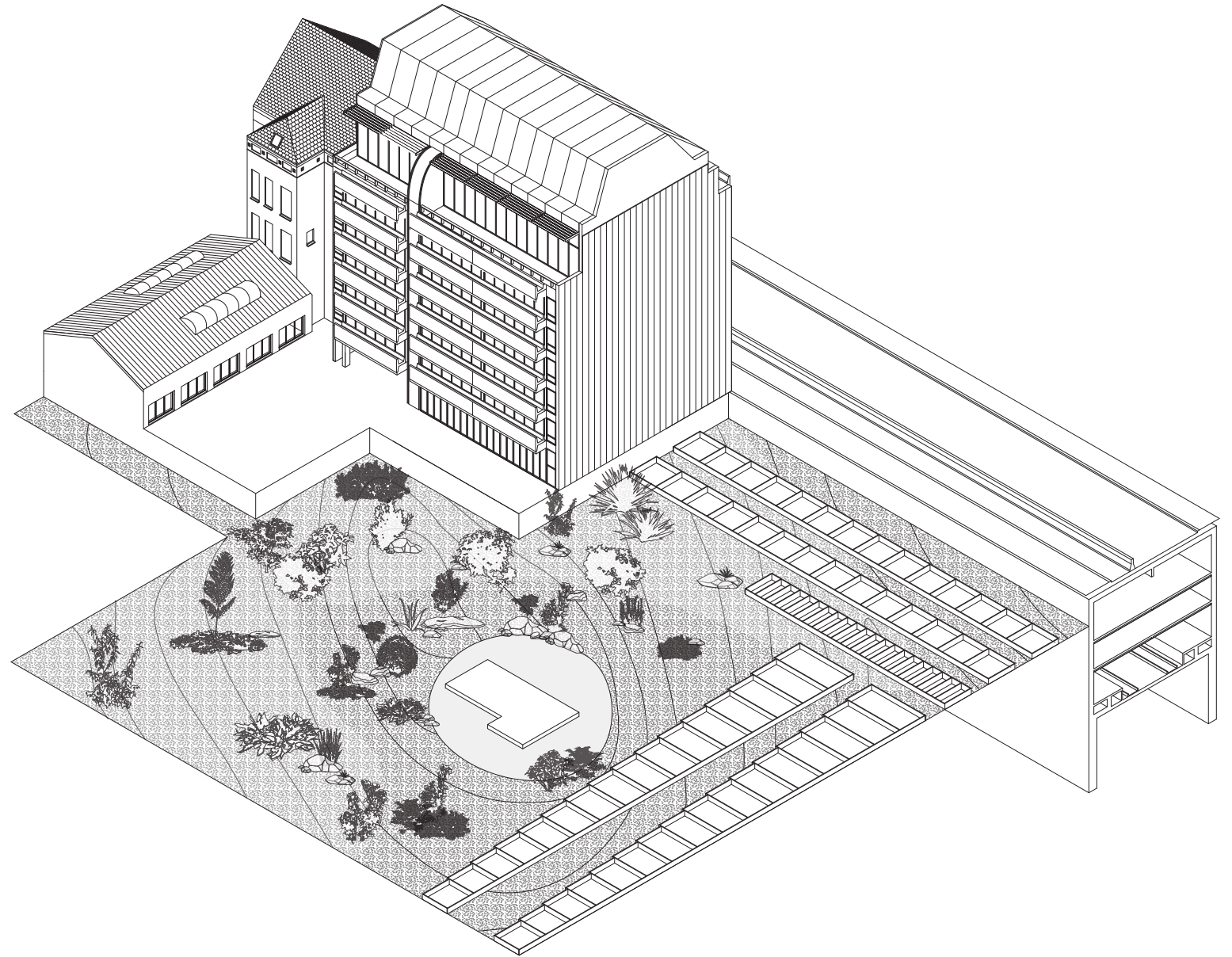
1. public garden
2. glasshouse
3. community center
4. open structure/ ex-parking garage
5. pergula square
6. shed theater
7. villa community center
8. office bar/ restuarant

project intervention
plot scale



1. soil in winter condition

project intervention
plot scale



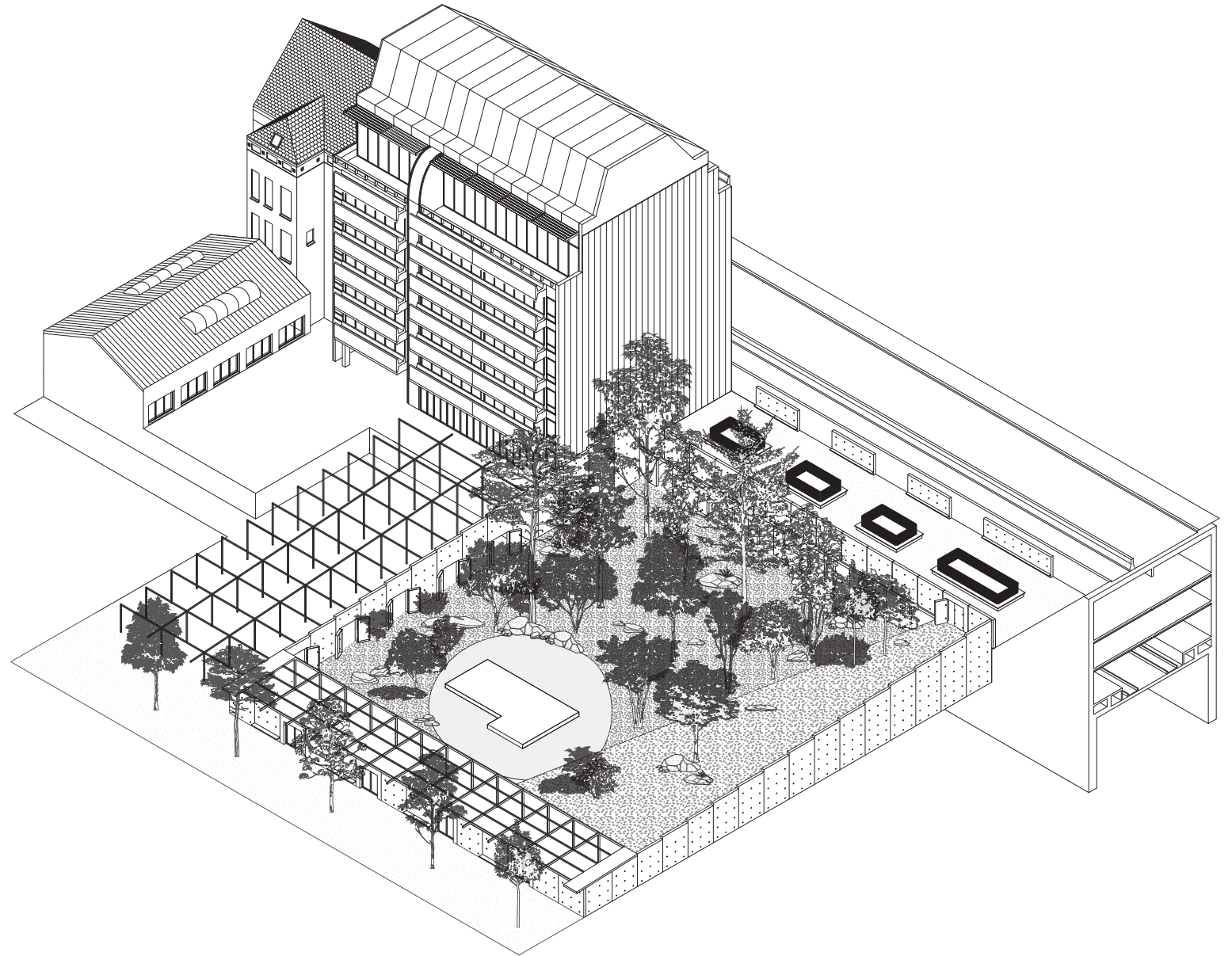
2. addition of construction steel and mold

project intervention
plot scale



*3. element is lifted from the ground and released from
the mold elements*

project intervention
plot scale



3. secondary, lightweight structures are made in place.

[making use of everything that is there]

concrete:

1 m³ (2285 kg)

sand: 660 kg

gravel: 1300 kg

cement: 325 kg

1 m³ sand: 1500 kg

1 m³ gravel: 1900 kg

1 m³ cement: 1250 kg

1 element: 3.5 x 3.6 x 0.4 = 5.04 m³

sand: 3326.4 kg

gravel: 6552 kg

cement: 1638 kg

65 elements needed: 327.6 m³ concrete/ 748 566 kg

in need: 216 216 kg sand - 425 880 kg gravel - 106 470 kg cement

sand: 400 m³ (hill) + 100 m³ pont = 500 m³ x 1500 kg / m³ = 750 000 kg

gravel: 200 m³ elements + 800 m³ hill = 1000 m³ x 1900 kg / m³ = 1 900 000 kg

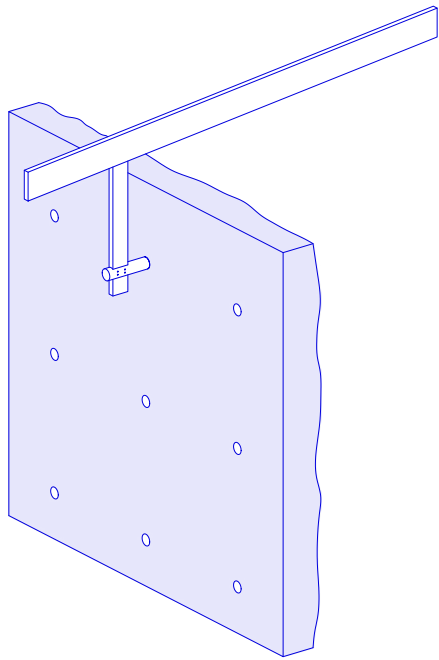
cement: 250 m³ x 1250 kg / m³ = 312 500 kg

total weight: 2 962 000 kg

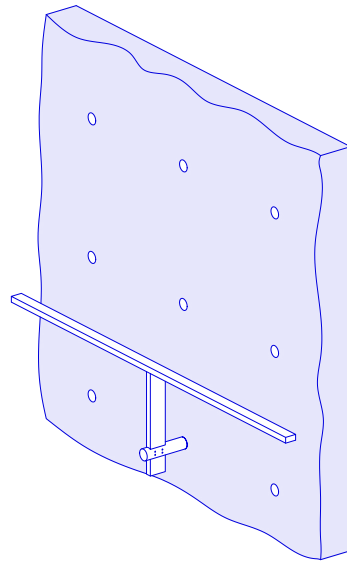
total mass concrete: 1296.5 m³

1296.5 / 5.04 = 257,2 concrete elements

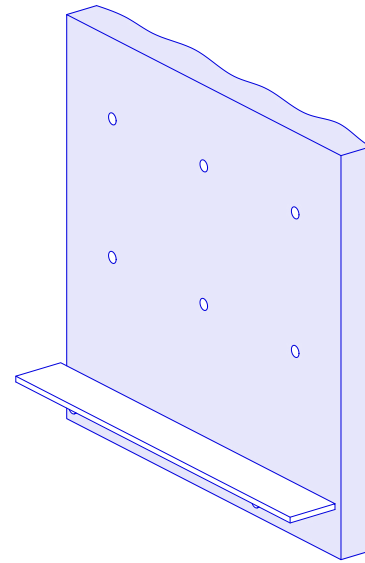
project intervention
fragment scale



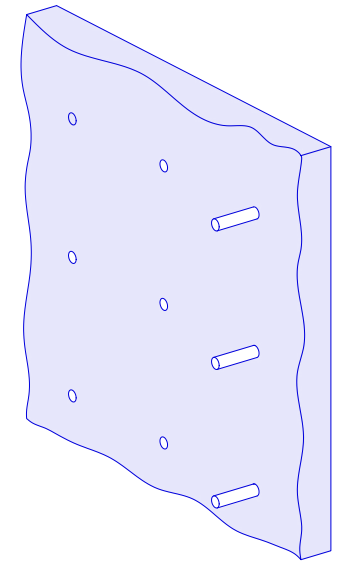
wall as construction element



wall as balustrade



wall as seating element



wall as planting element

project intervention
fragment scale

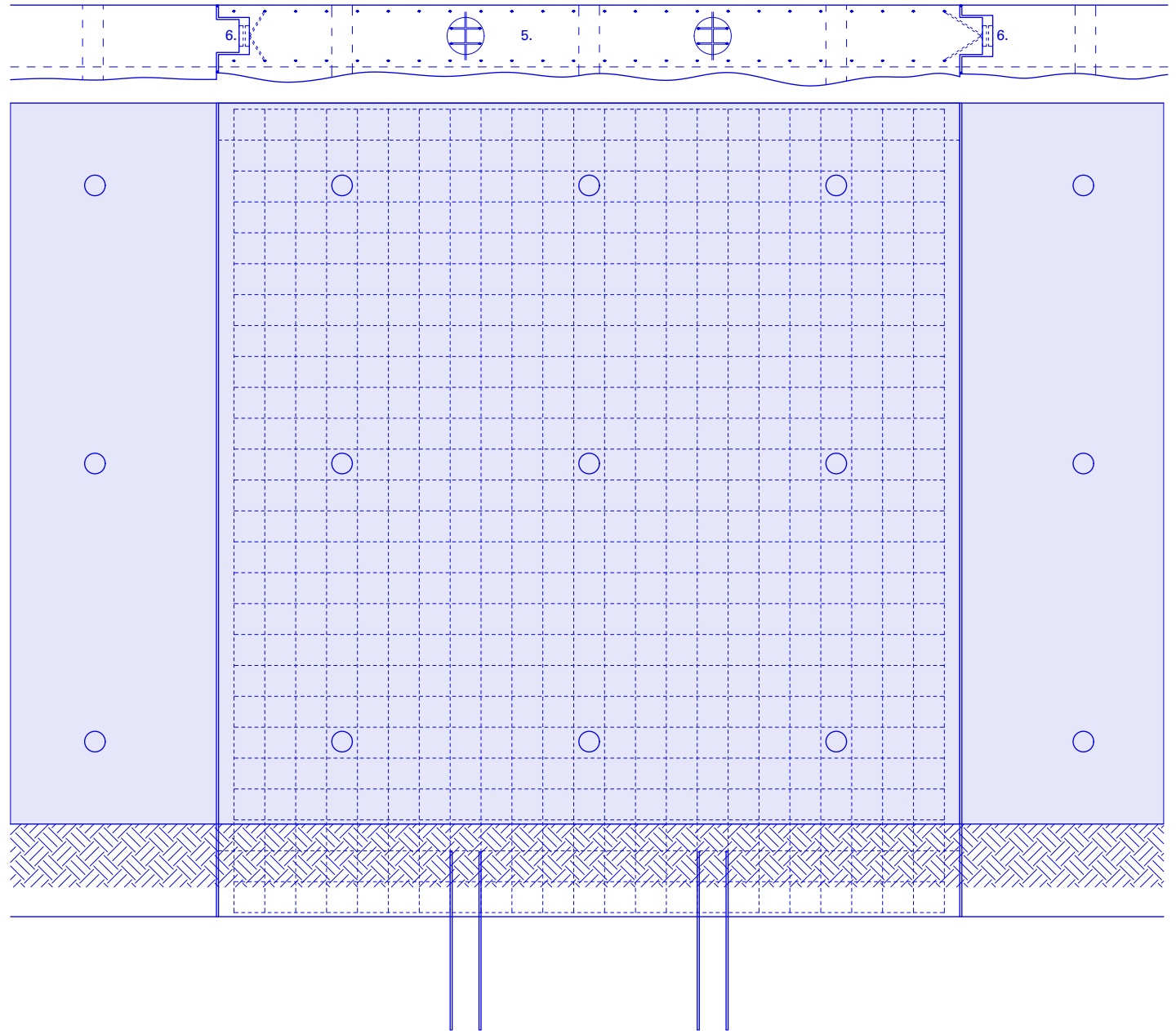
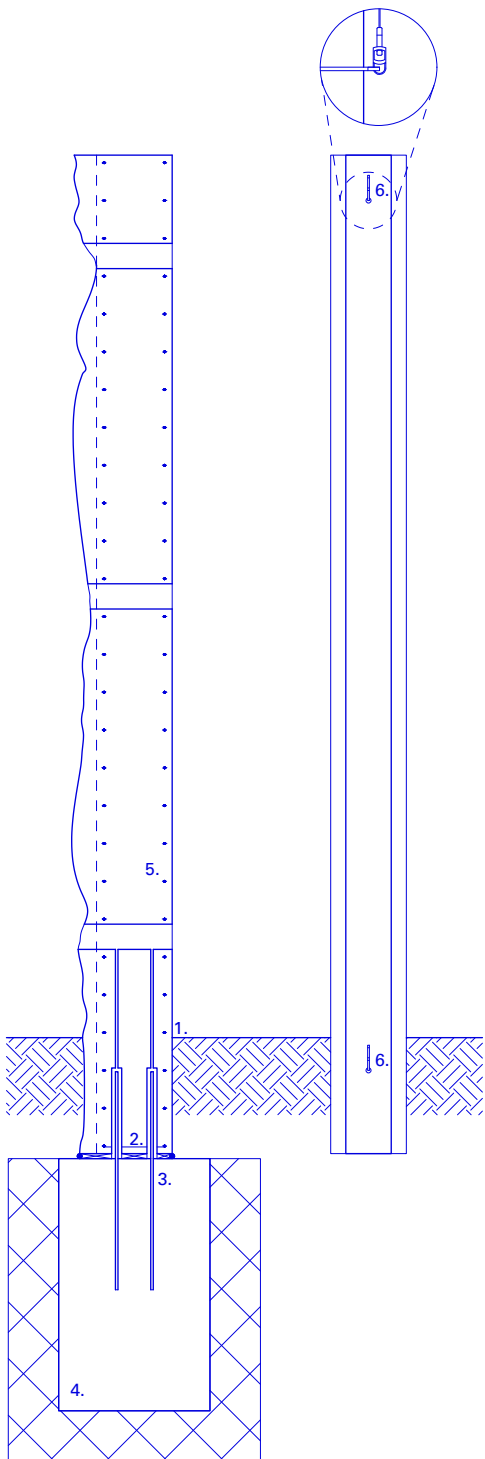


model 1.25

project intervention
fragment scale



model 1.25



1. gain
2. mortar
3. cutting
4. shallow foundation beam
5. reinforcement mesh 150 mm/ 7mm
6. lift anchors

ambiguity as the foundation for coexistence
civic center, Brussels

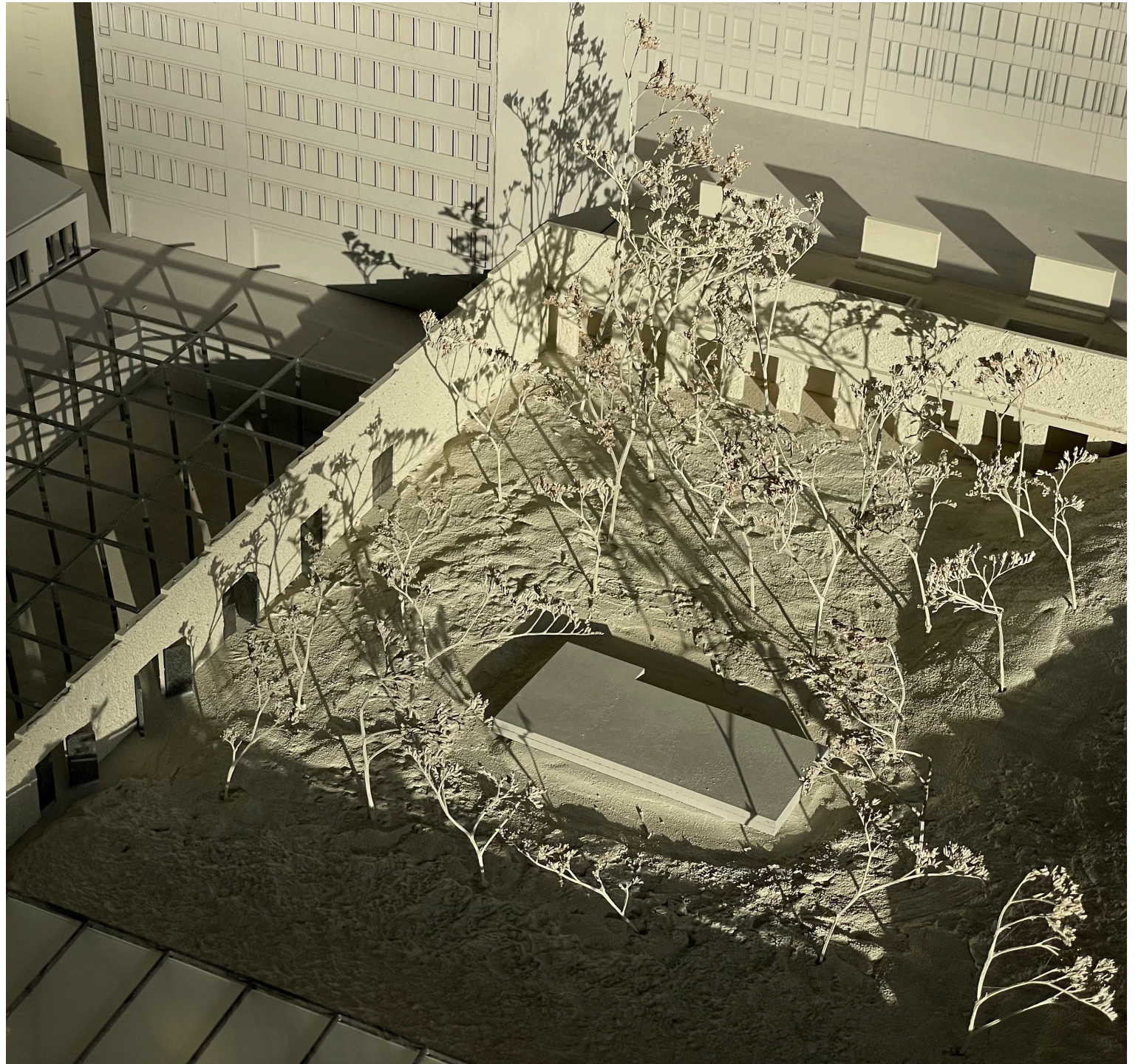
name prefab wall detailing
scale 1.20 A3
date 07/12/2022
by sander meert

project intervention
fragment scale



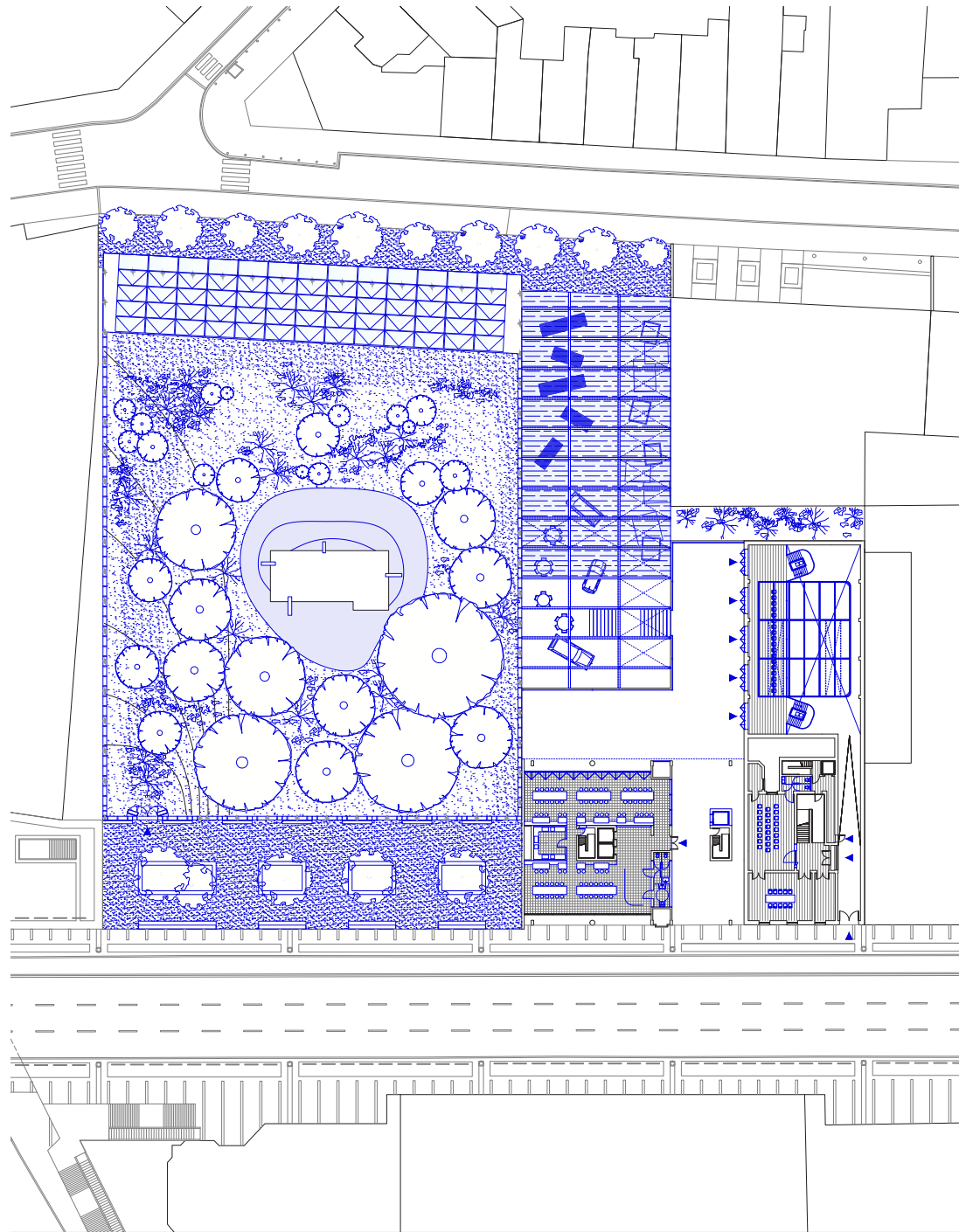
mock-up 1.10

project intervention
floorplan

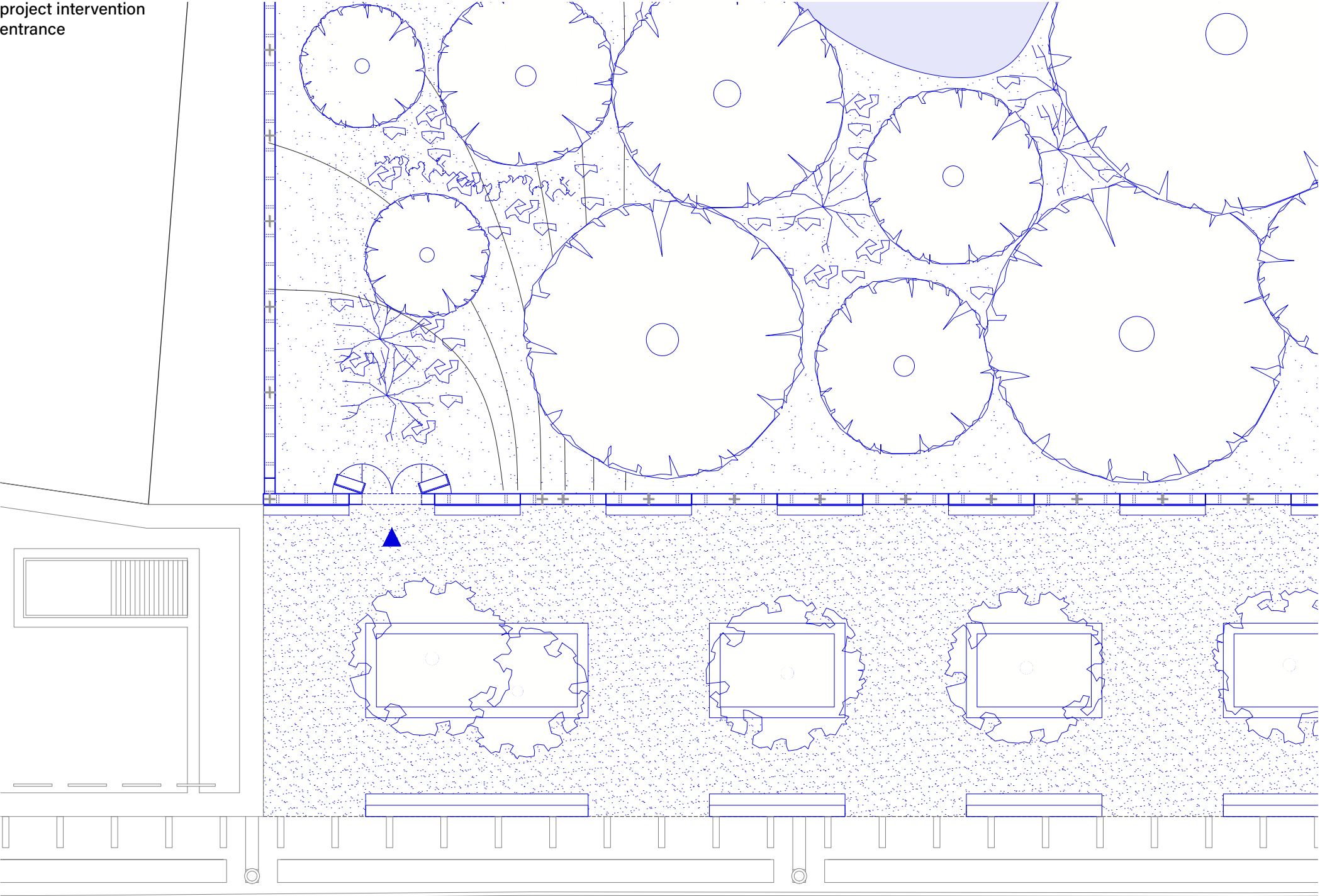


model 1.100

project intervention
floorplan



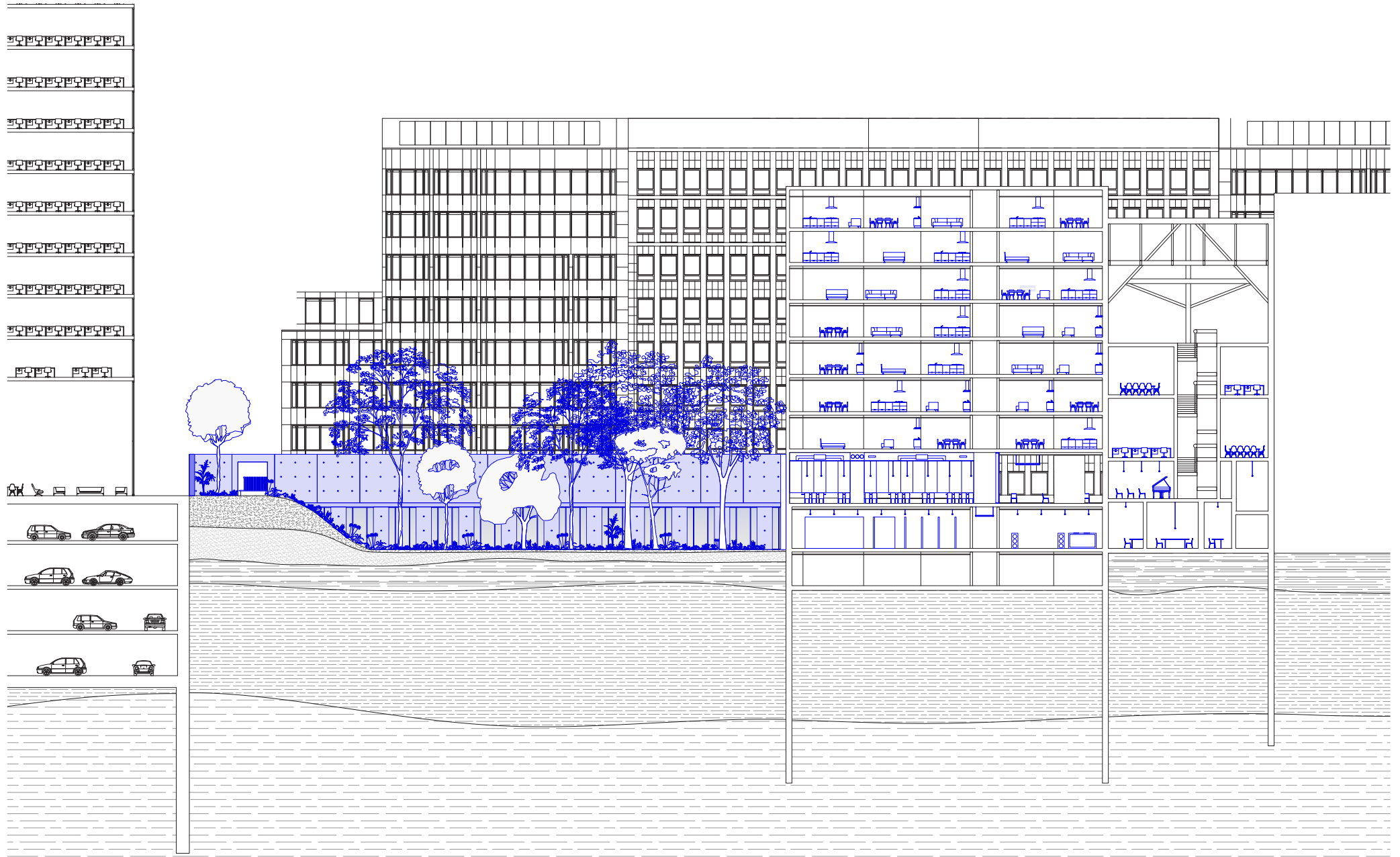
project intervention
entrance



project intervention
entrance

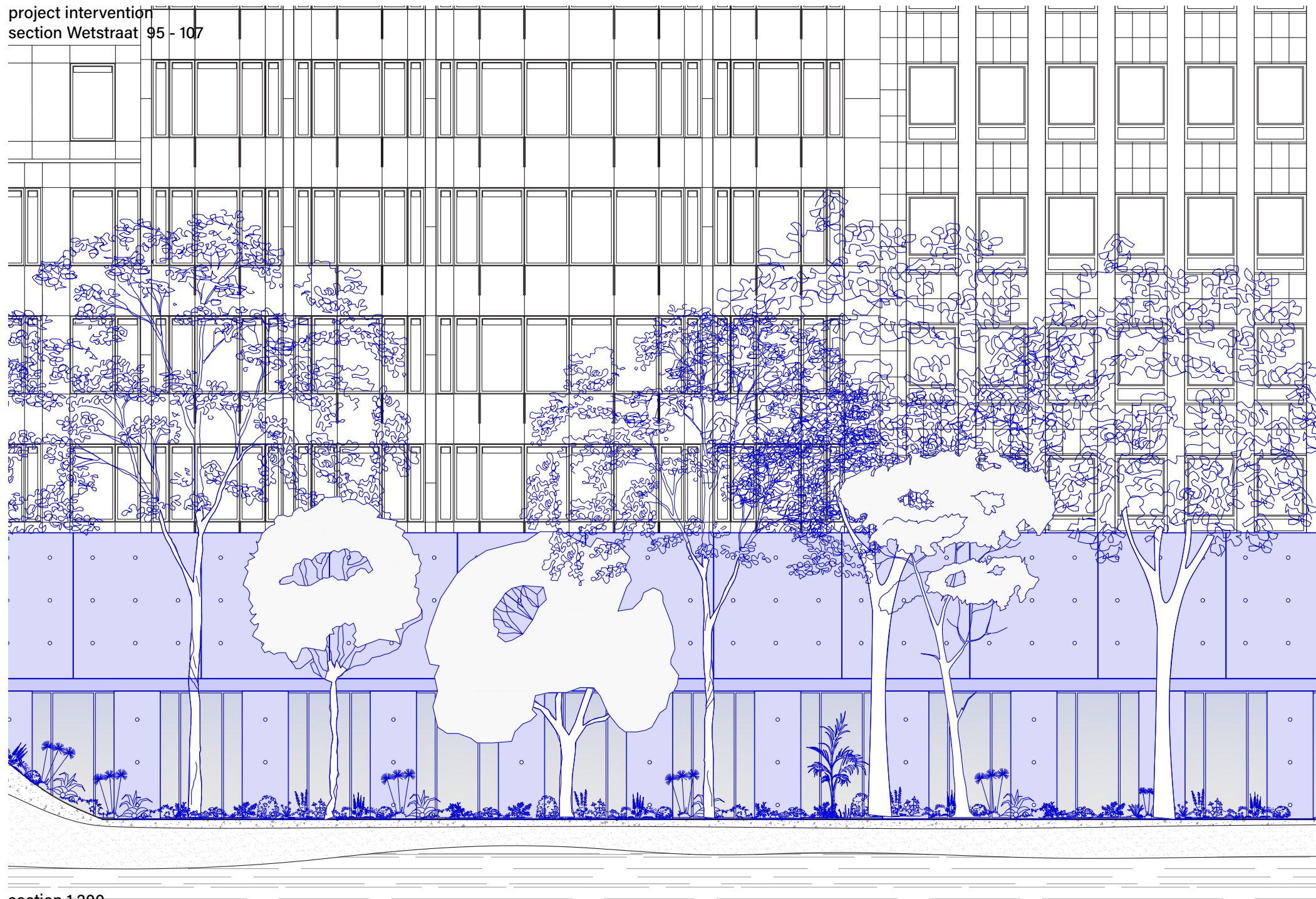


project intervention
section Wetstraat 95 - 107



section 1.200

project intervention
section Wetstraat 95 - 107

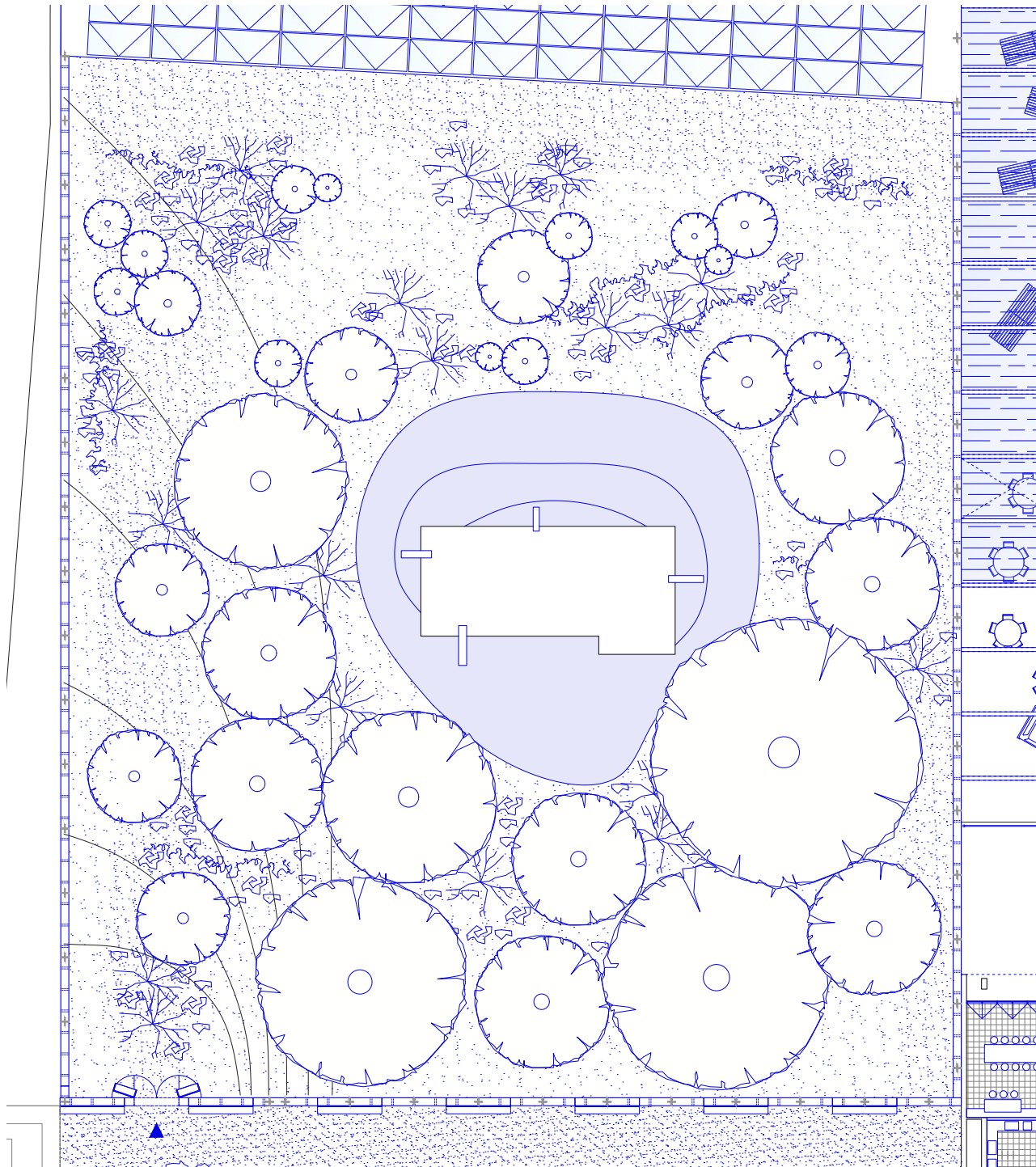


section 1:200

project intervention
view on garden - community center

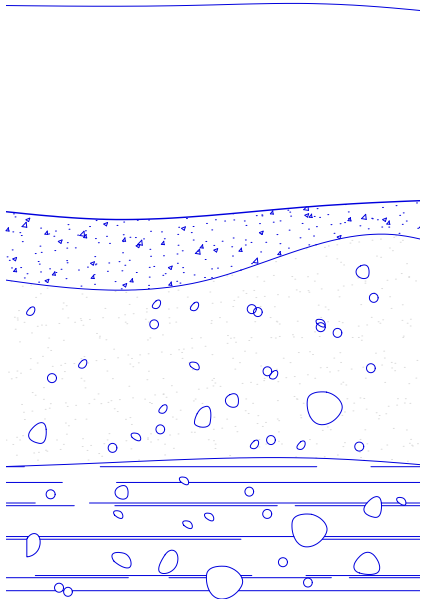


project intervention
garden

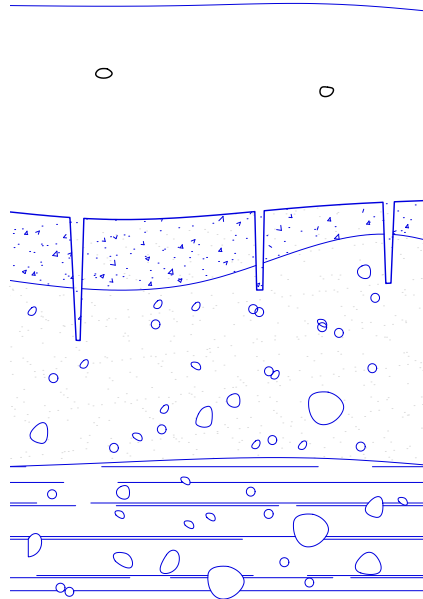


floorplan 1.200

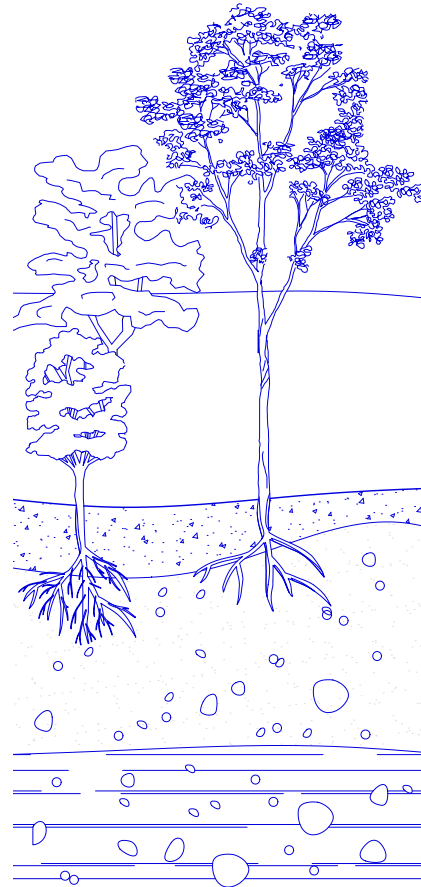
project intervention
garden



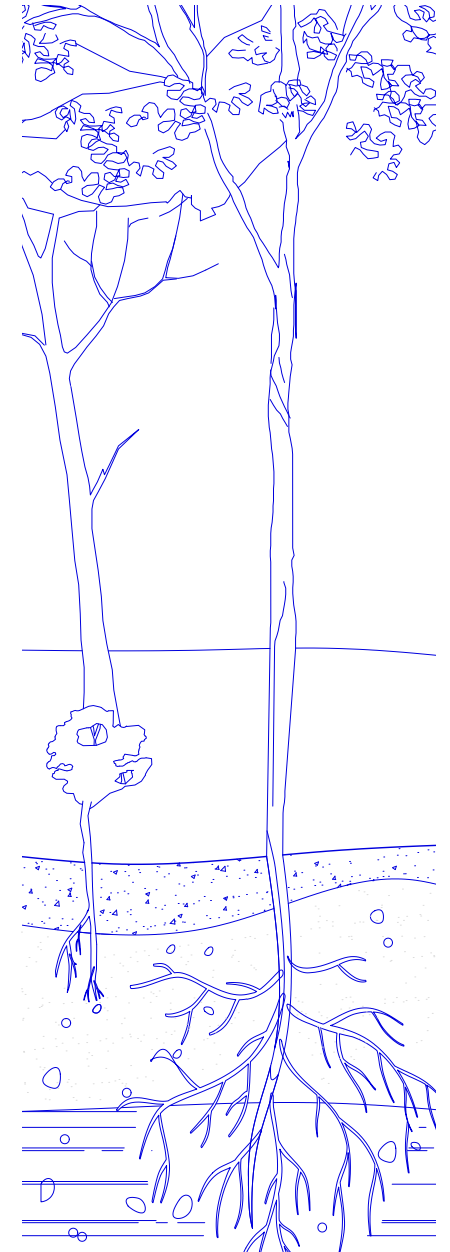
0. current vegetation



1. planting tree seedlings (3/ m2) in a random pattern



2. natural selection among the seedlings allows the most adapted ones to develop the quickest



3. after 20 years, most trees are mature and the ecosystem works optimally

project intervention
garden

1. insects

beetles, bee, butterflies, dragonfly, spiders

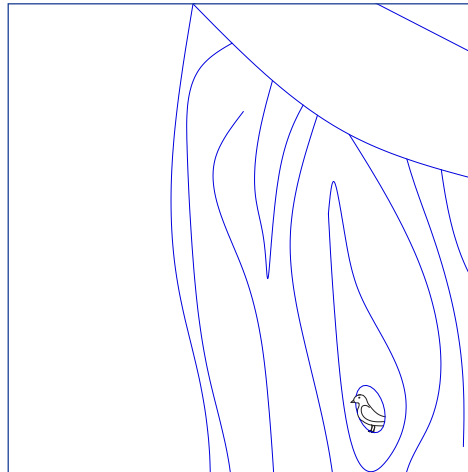
2. soil fauna

3. birds

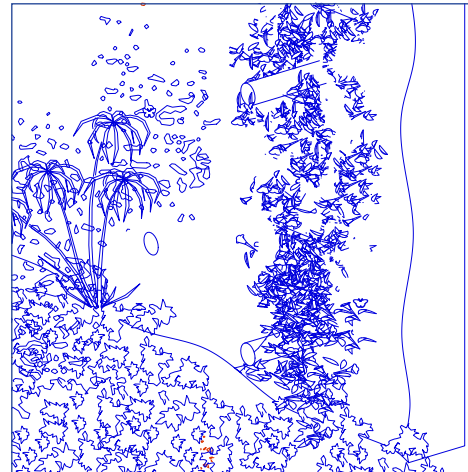
house sparrow, common swift, black redstart, eurosian oystercatcher, starling, western jackdaw, sand martin, martin, barn swallow, blackbird, woodpecker, mallard, tawny owl (bats)

4. mammals

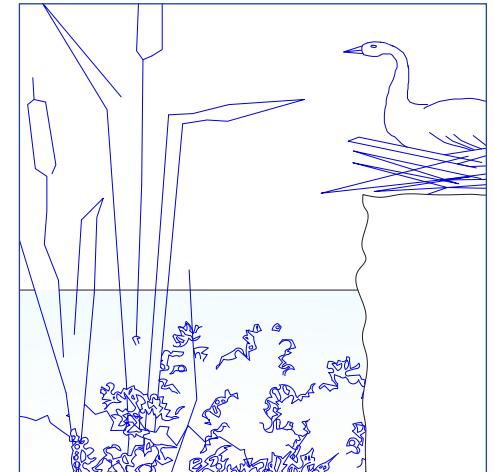
domestic animals, european polecat, stone marten, hedgehog, squirrel,



concrete wall as sand martin wall

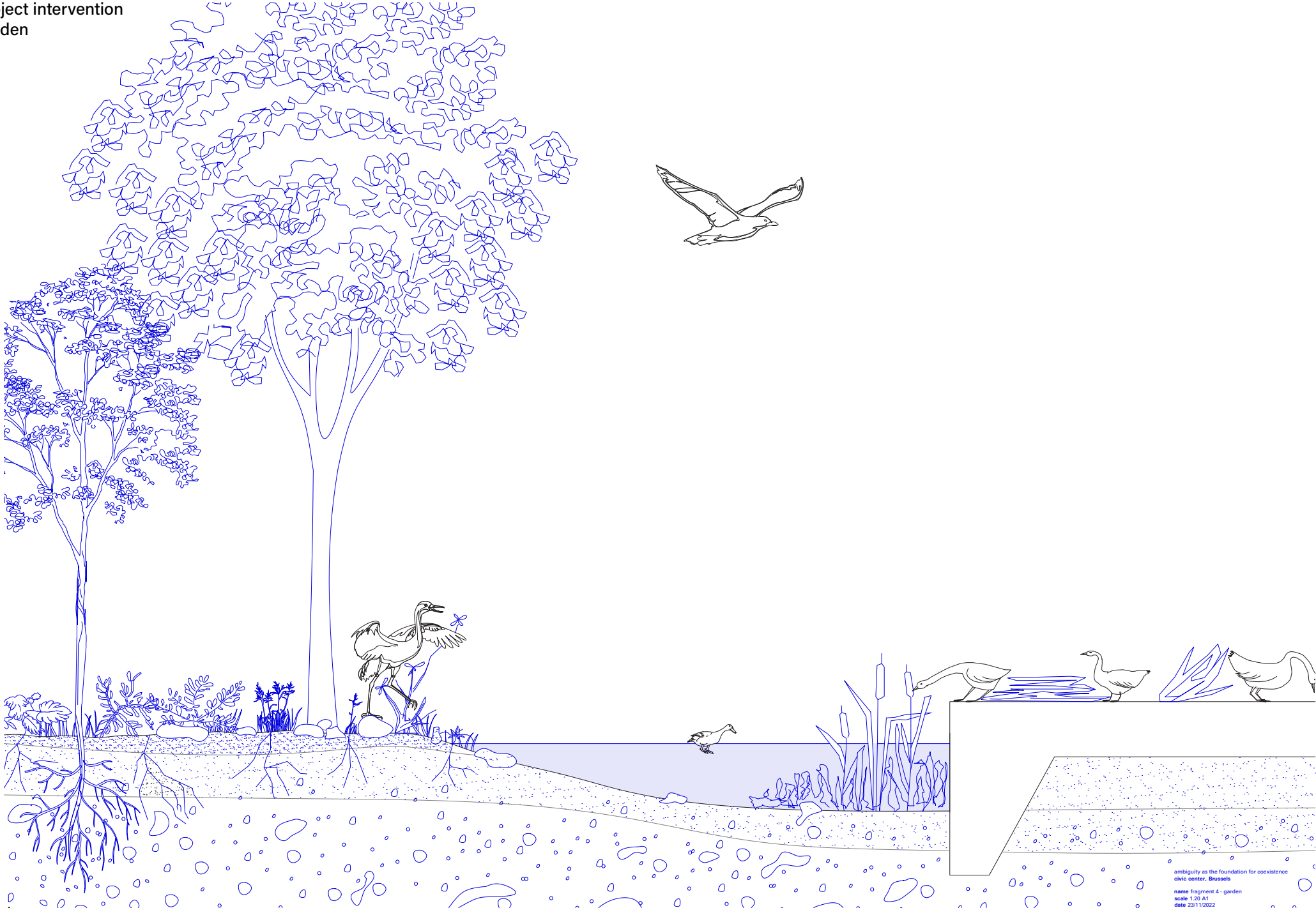


wall as infrastructure for spontaneous vegetation



island protected by water

project intervention
garden



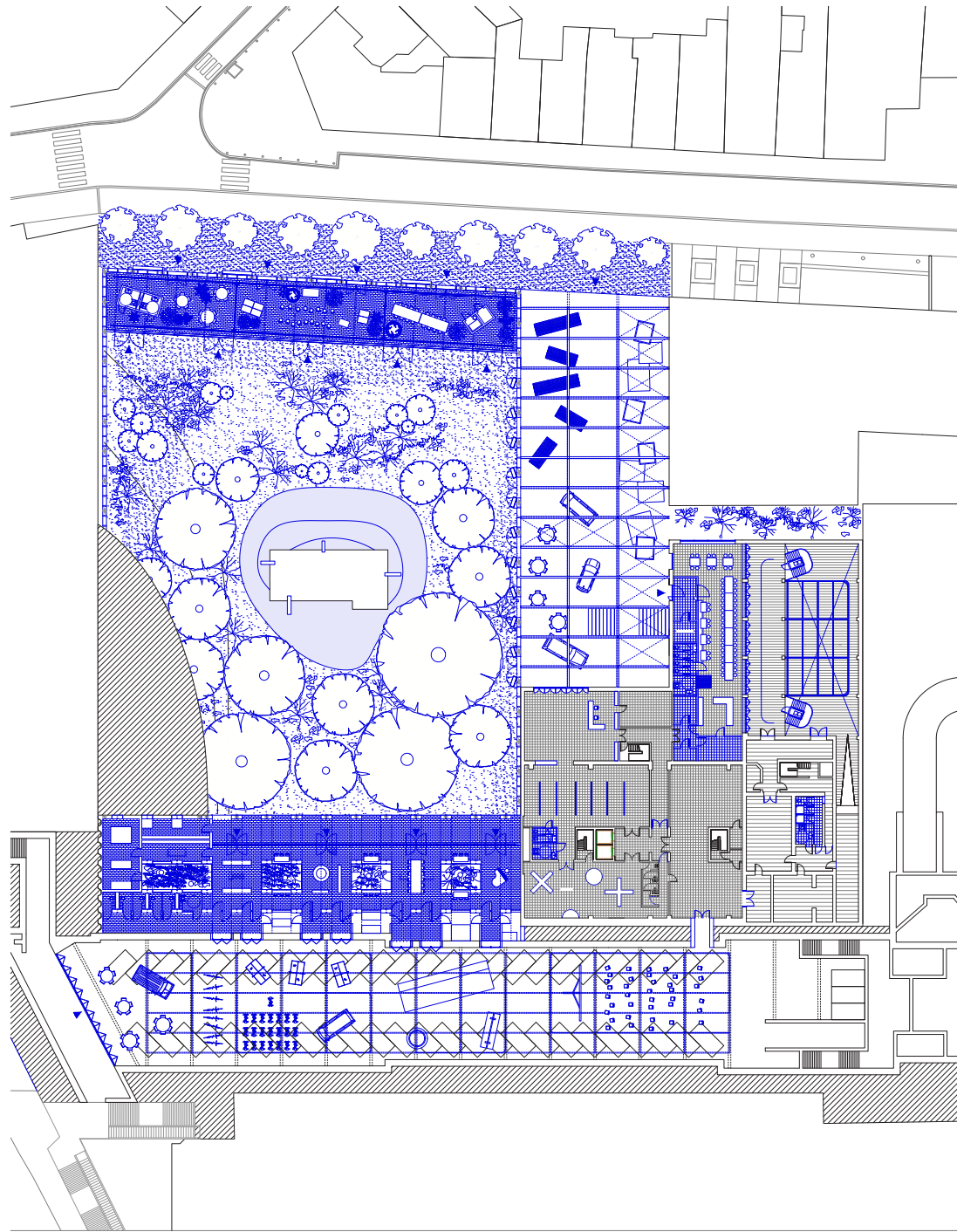
section 1.20

ambiguity as the foundation for coexistence
civic center, Brussels
name fragment 4 - garden
scale 1:20 A1
date 22/11/2022

project intervention
garden



project intervention
floorplan

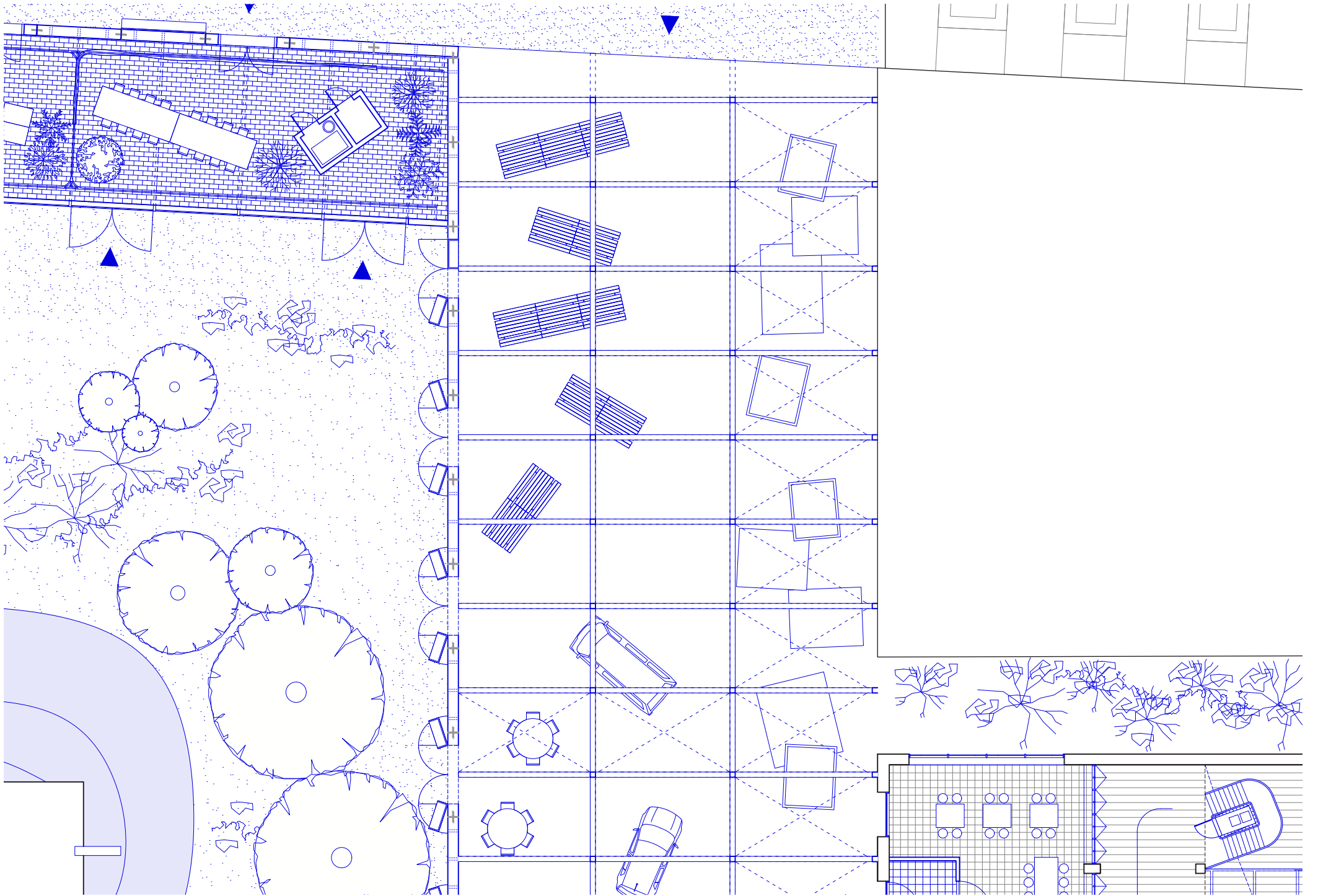


project intervention
floorplan



project intervention
view on greenhouse





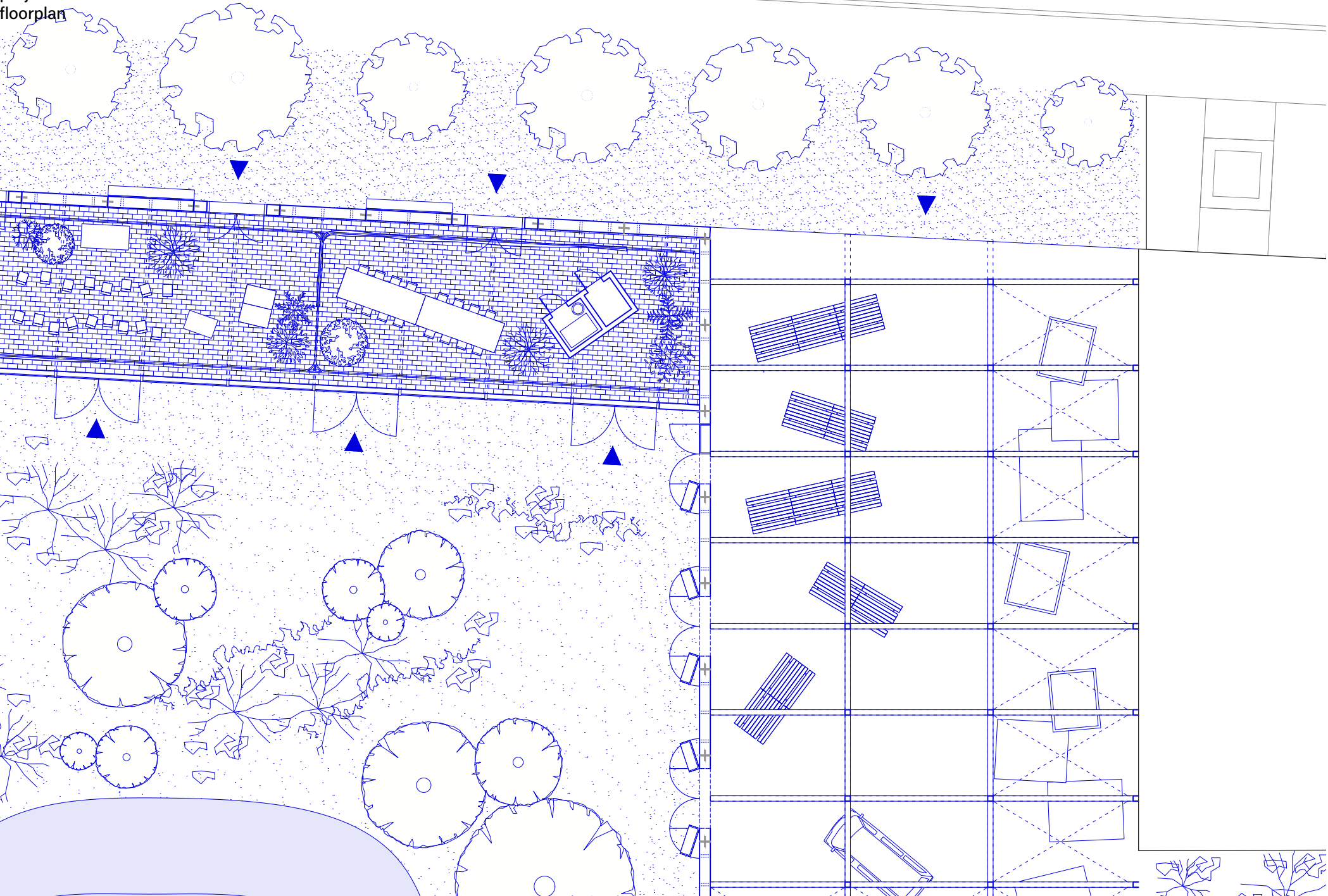
project intervention
view on pergola



project intervention
view on pergula



project intervention
floorplan



project intervention
view on pergula - glasshouse



model 1.100

project intervention
section Wetstraat - Jacques de Lalaingstraat

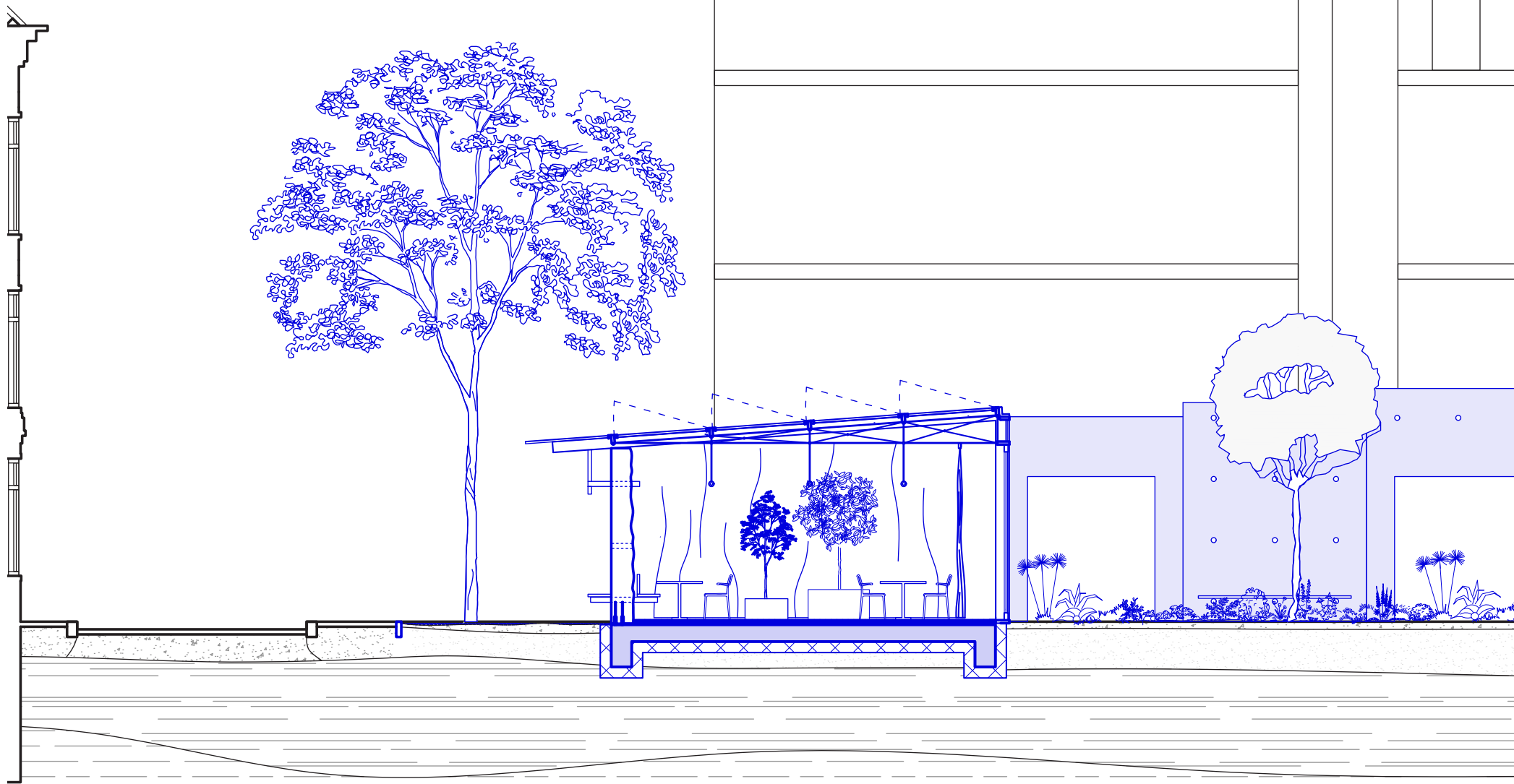


section 1.200

project intervention
section Wetstraat - Jacques de Lalaingstraat

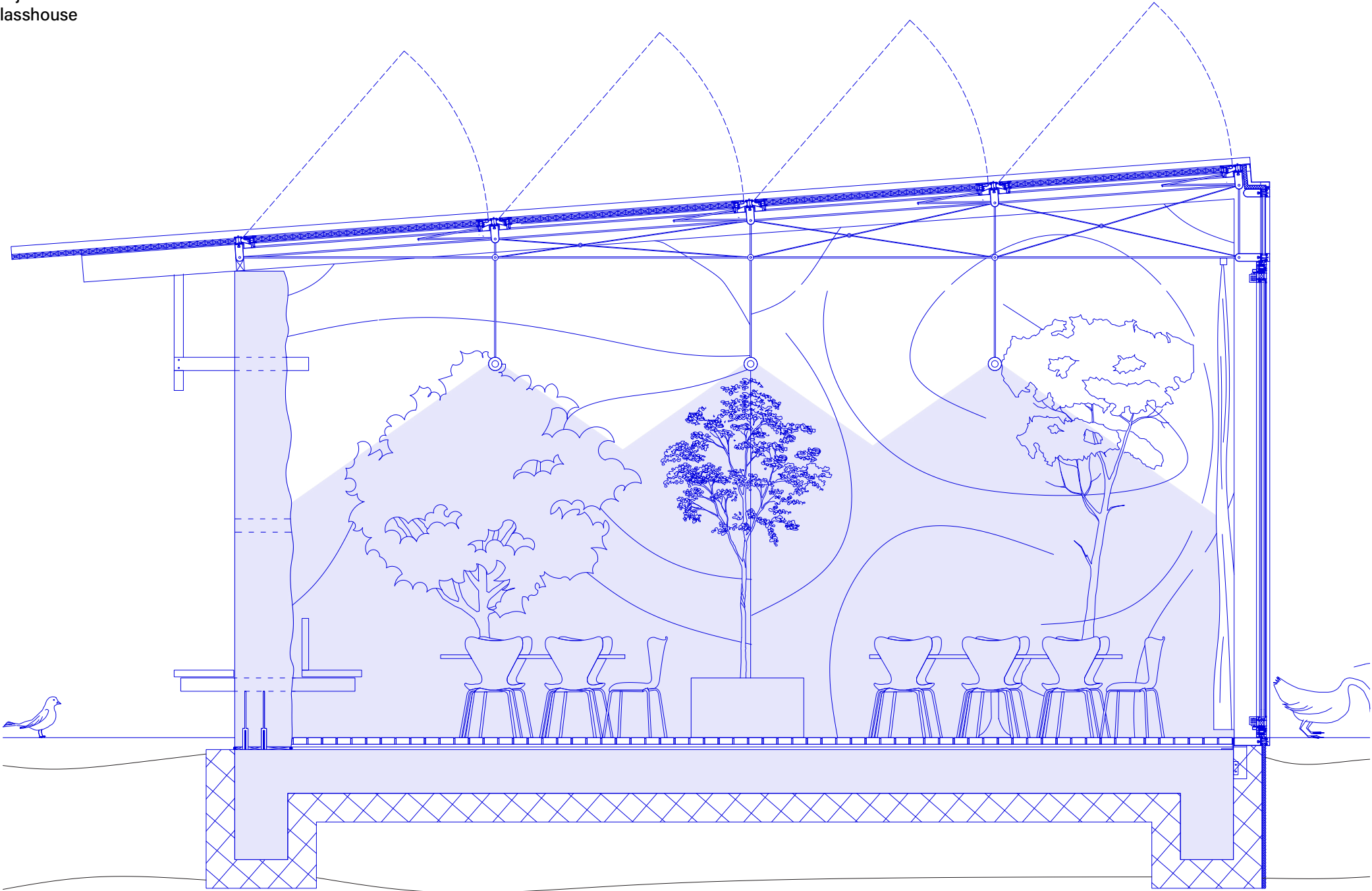
De Meuter

www.demeuter.nl 02.582.12.44



section 1:200

project intervention
glasshouse

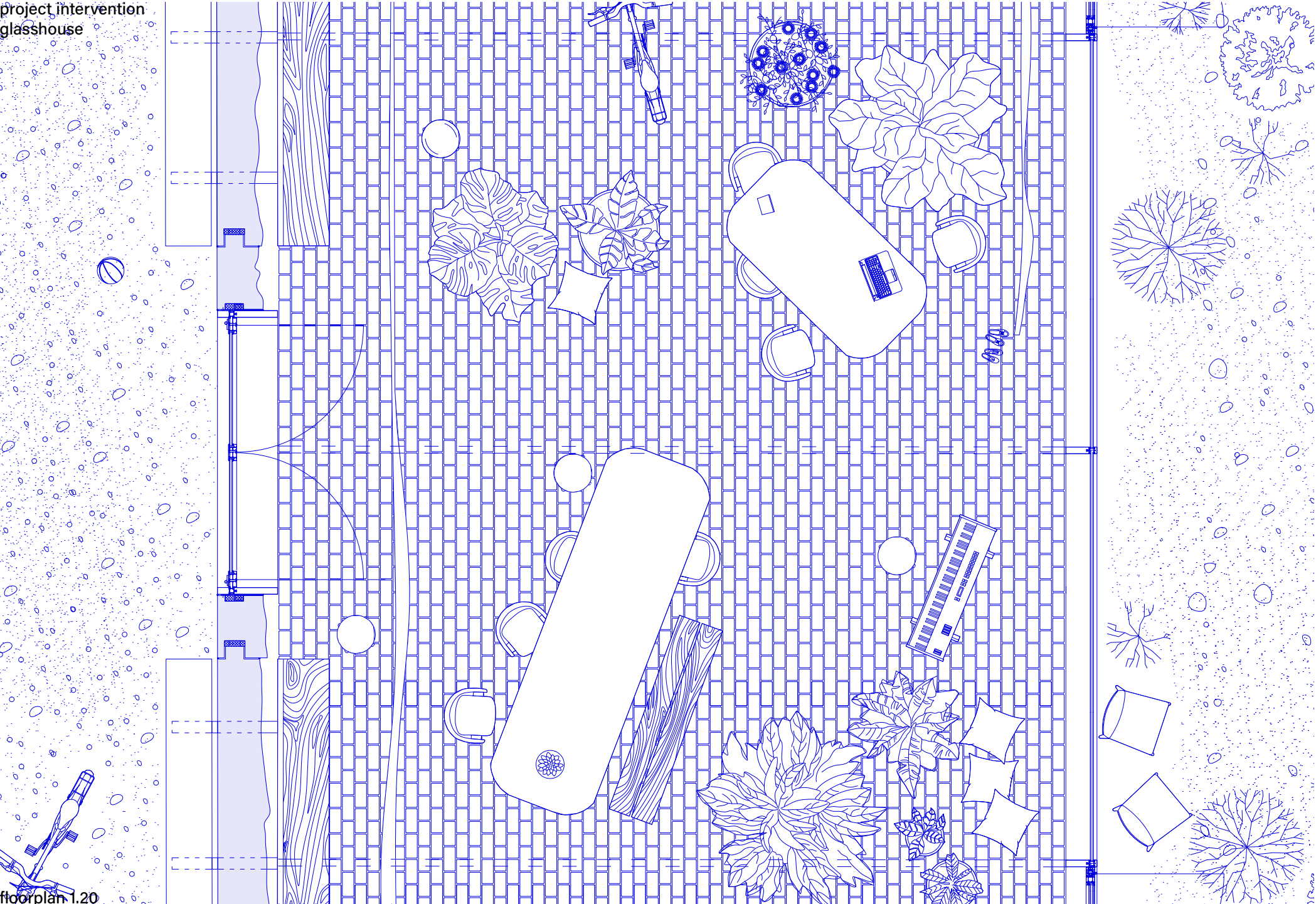


section 1.20

project intervention
glasshouse

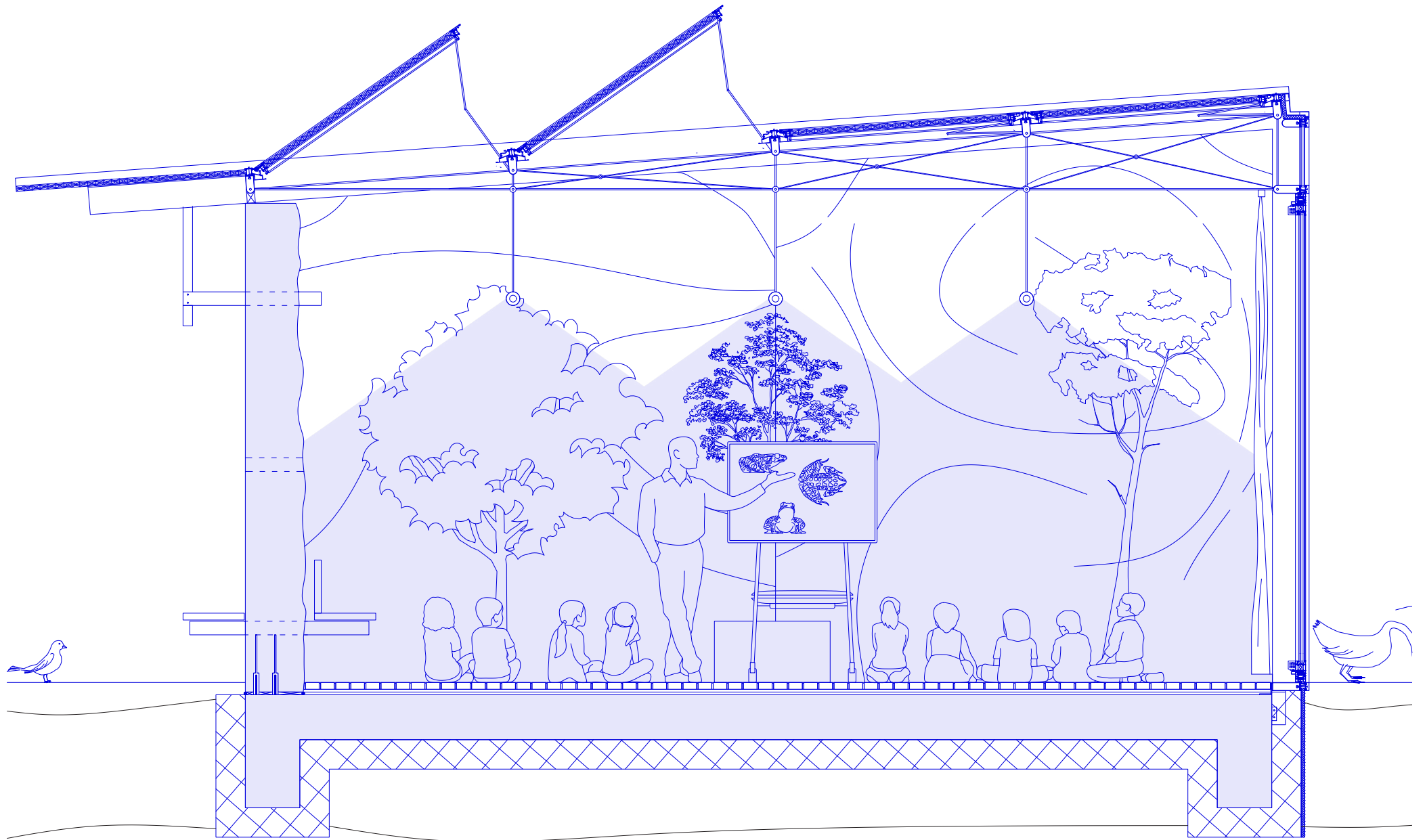


project intervention
glasshouse



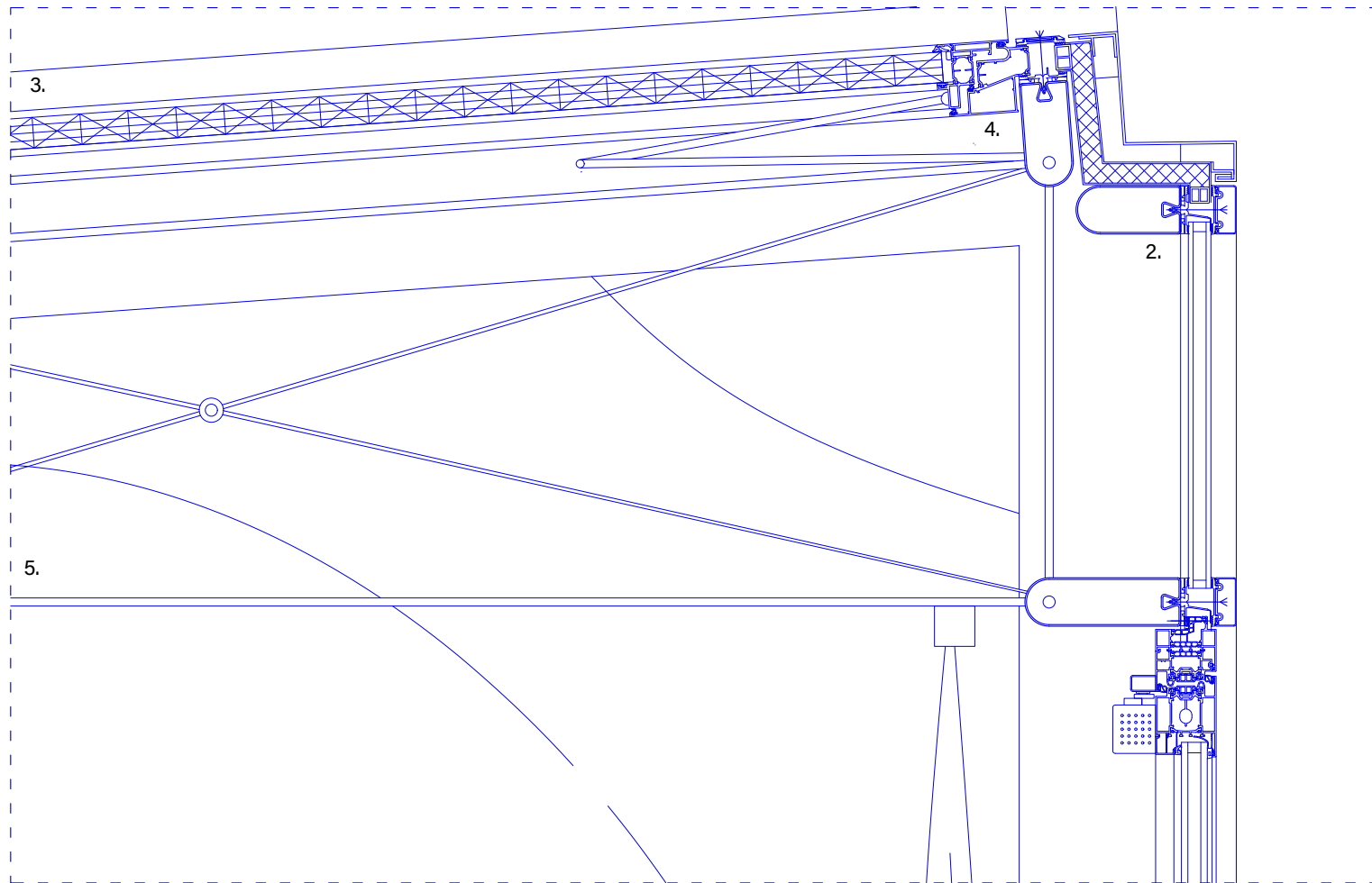
floorplan 1.20

project intervention
glasshouse



section 1.20

project intervention
glasshouse



1. translation element: aluminum quiver profile, fixed on standard aluminum profile (fixed moment).

2. aluminum curtain wall/ roof system (60 x 100 mm/ 60 x 200mm) with an integrated suspension system for technical/ constructive ceiling.

3. polycarbonate channel plate 40 mm.

4. aluminum hinge system: wax auto vent connected to aluminum profile; opens automatically when the temperature rises in the glasshouse.

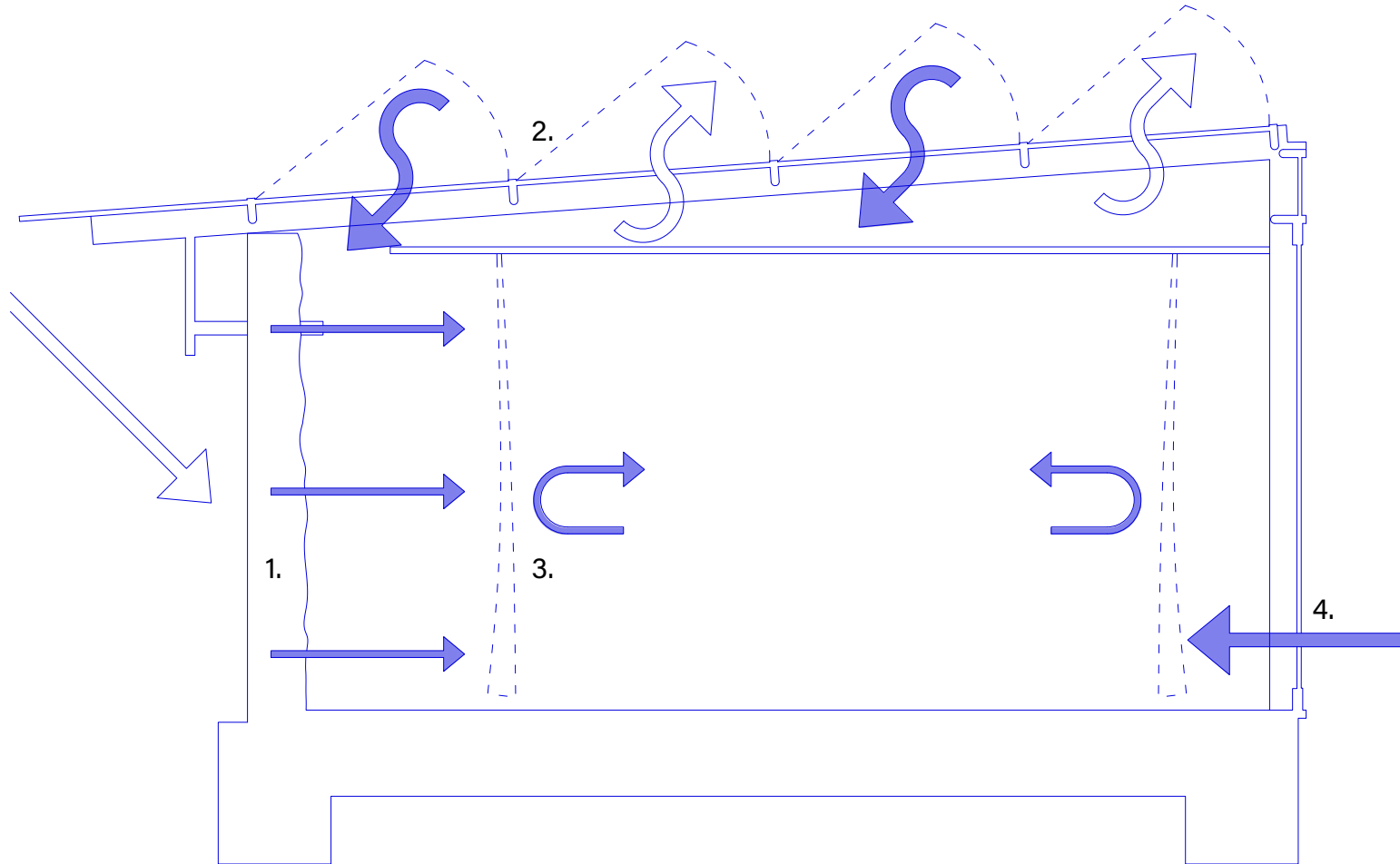
5. technical ceiling: aluminum construction, suspended on curtain wall/ roof system: a system for structural stability and attachment for lightning fixtures and curtains.

6. prefab wall attachment: structural steel of foundation attached to prefab wall element, closed off by concrete.

7. floor construction: flat foundation, in-situ made (200 mm isolation), leveling layer (30 mm), cement (20 mm), stone bricks (50 mm).

project intervention
glasshouse

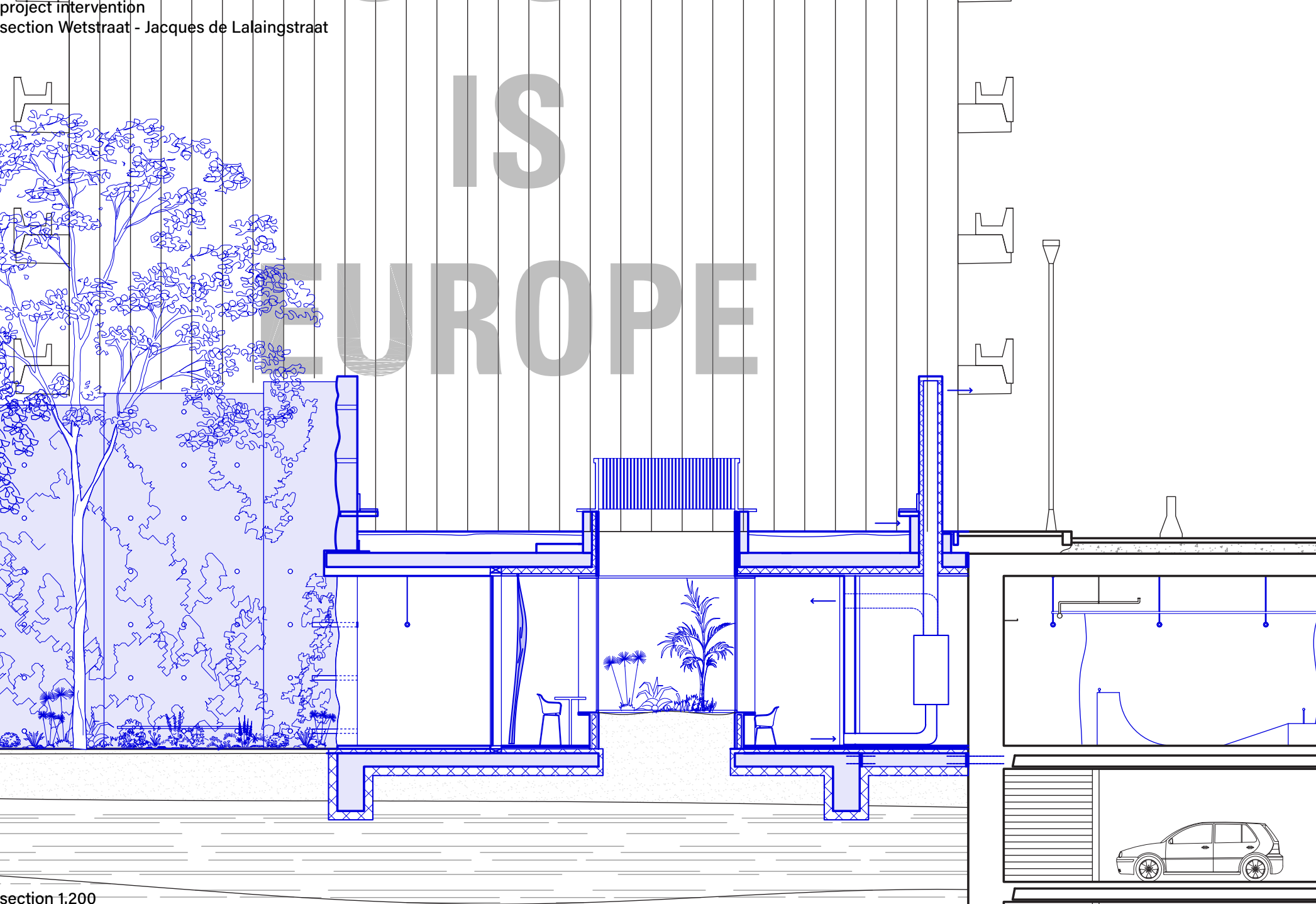
1. thermal mass of concrete wall element
2. automatic window for natural ventilation
3. isolated curtains to reflect the heat/ partitioning the space.
4. natural ventilation via facade.



climate principle

project intervention
section Wetstraat - Jacques de Lalaingstraat

IS EUROPE

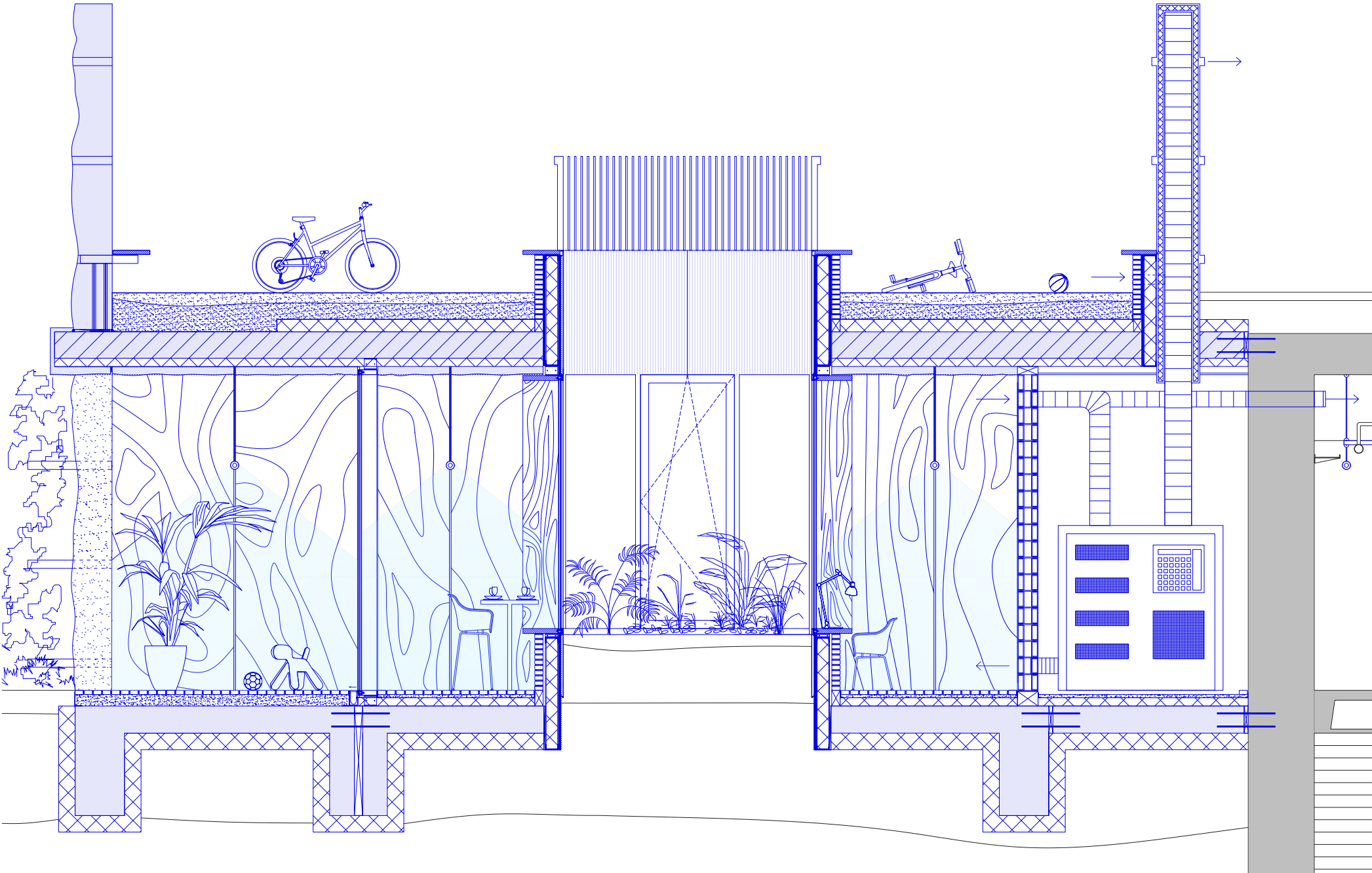


section 1:200

project intervention
Wetstraat square



project intervention
community center

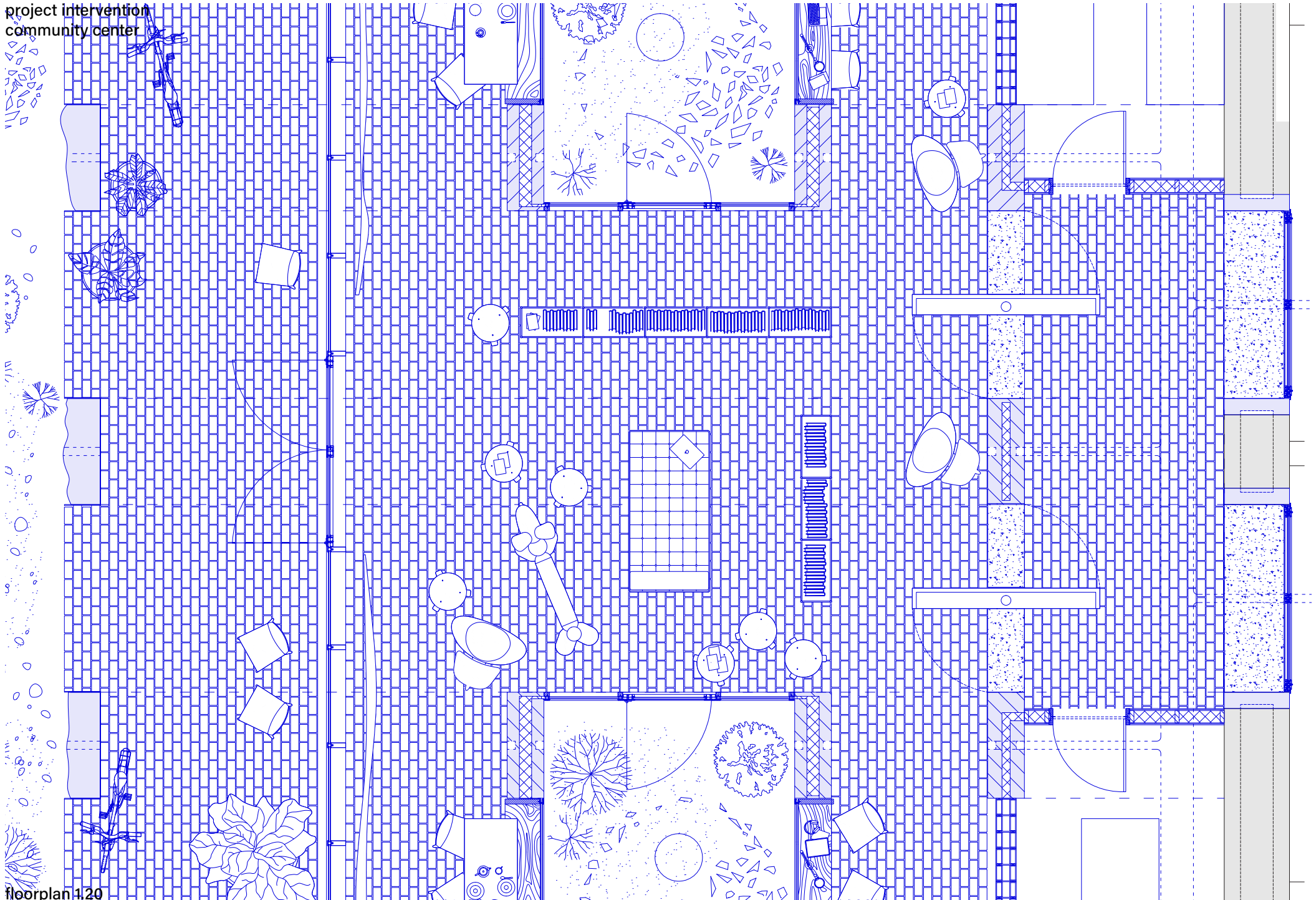


section 1.20

project intervention
community center



project intervention
community center

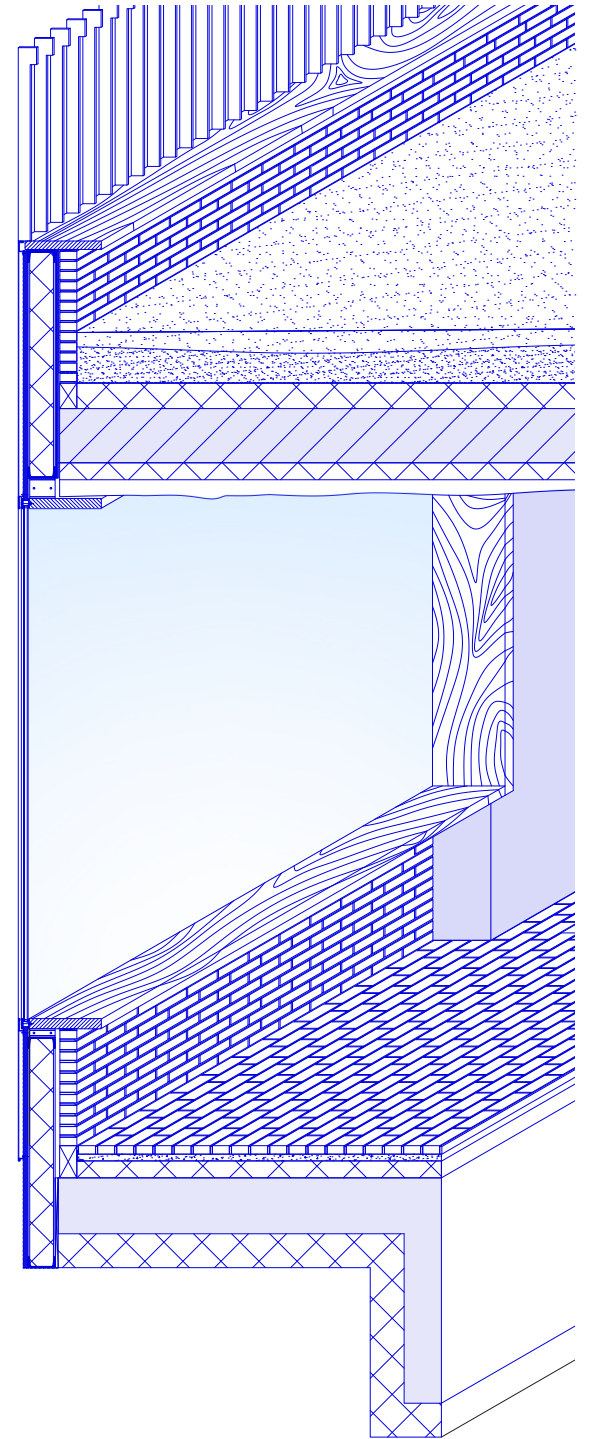


floorplan 1:20

project intervention
community center



project intervention
community center



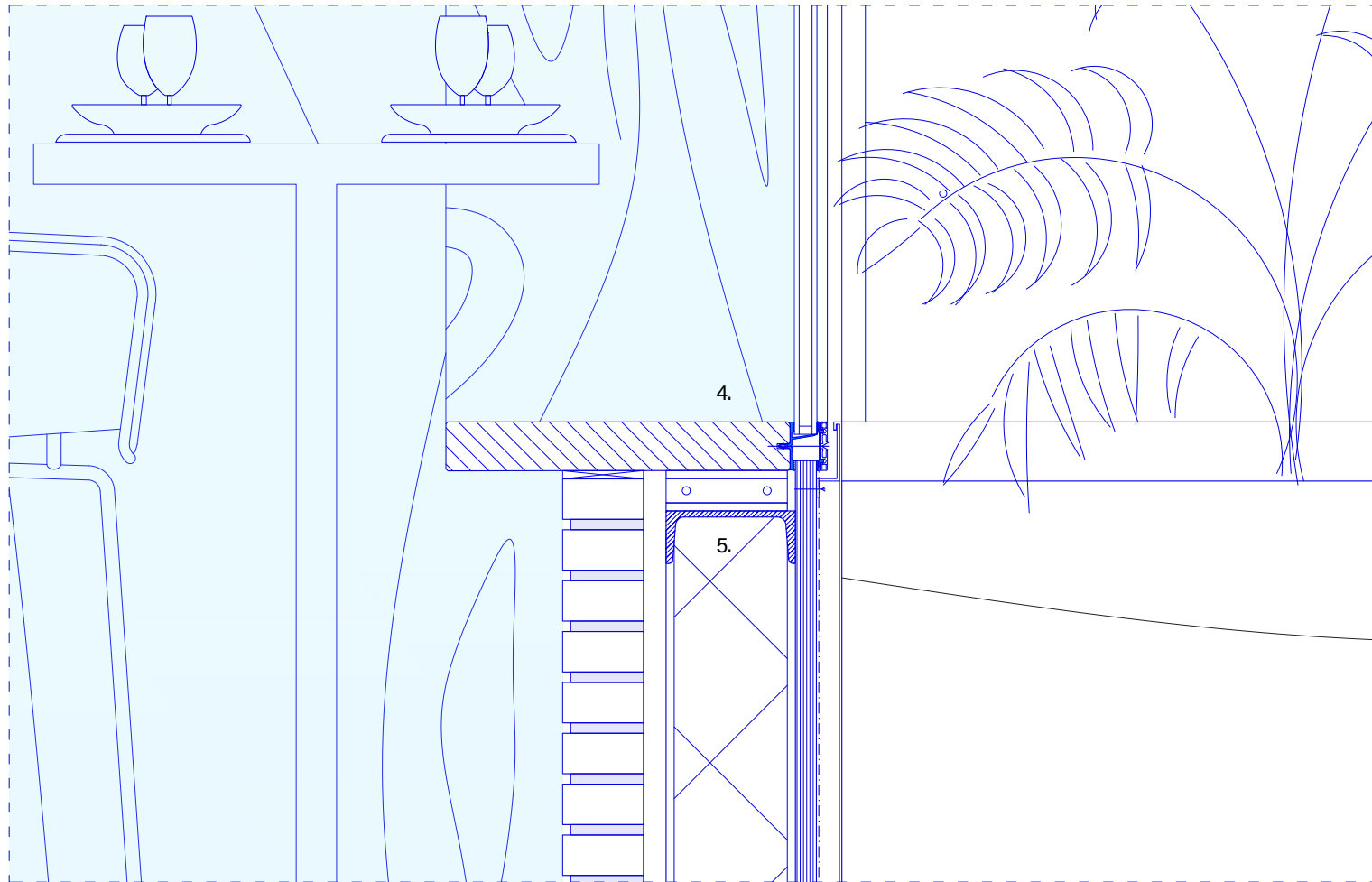
patio window principle

project intervention
community center



patio window principle

project intervention
community center



1. prefab wall construction: structural steel of prefab floor attached to prefab wall element, closed off with concrete.

2. storey floor: watertight membrane, 320 prefab floor elements, 100 mm isolation inside (200 mm outside, 1000 mm over thermal shell), waterproof membrane, gypsum ceiling made from imprints of wall elements.

3. aluminum curtain wall system: attached to main construction, horizontal elements hidden in ceiling and floor.

4. wooden curtain wall system: extra deep mullions (430 mm), used as a seating element or desk element.

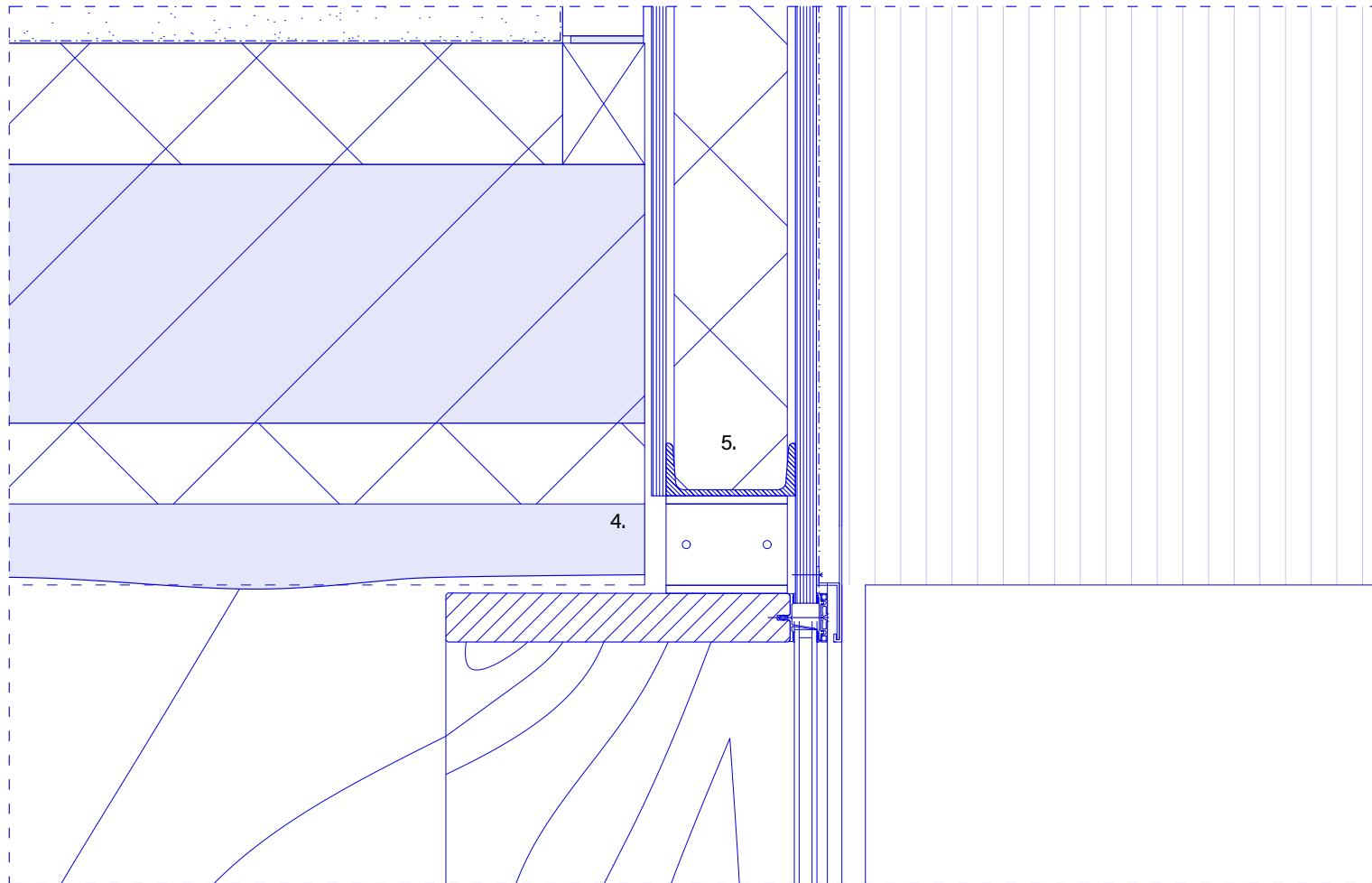
5. steel element: UMP 160 steel isolated frame, attached to main construction elements, finished with bricks on the interiors and aluminum cladding on the exterior.

6. flooring: flat foundation, in-situ made (200 mm isolation), outside 140 mm cement - 50 mm bricks, inside 100 mm isolation, leveler (30 mm), bricks (50mm). (flooring outside equipped with gutter at entrance).

7. outside seating element: wooden seating panel and steel balustrade attached on UMP 160 steel frame.

8. construction attachment: connecting structural steel element between (existing) concrete structure and added element, chemical anchored.

project intervention
community center



1. prefab wall construction: structural steel of prefab floor attached to prefab wall element, closed off with concrete.

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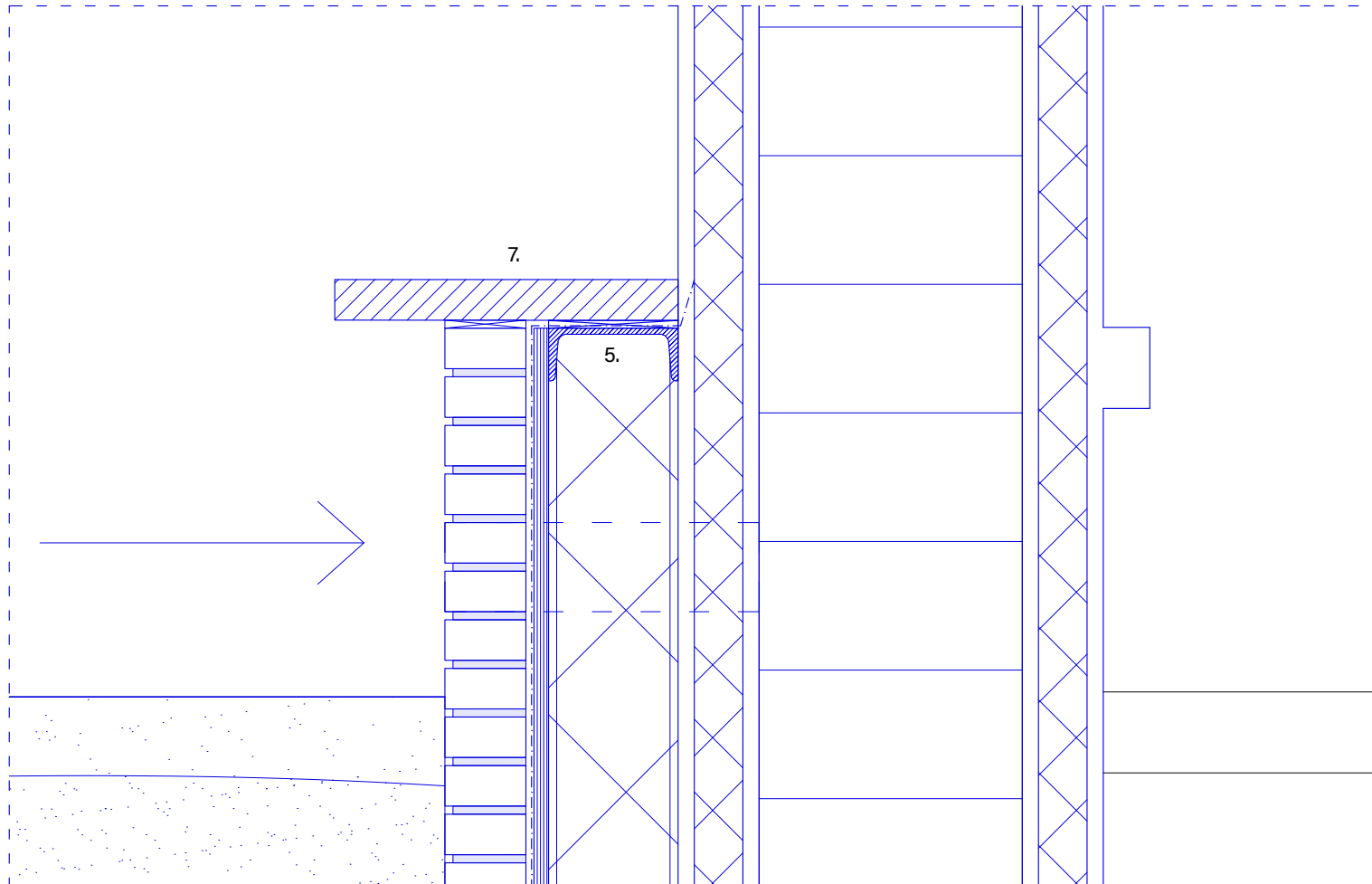
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project intervention
community center



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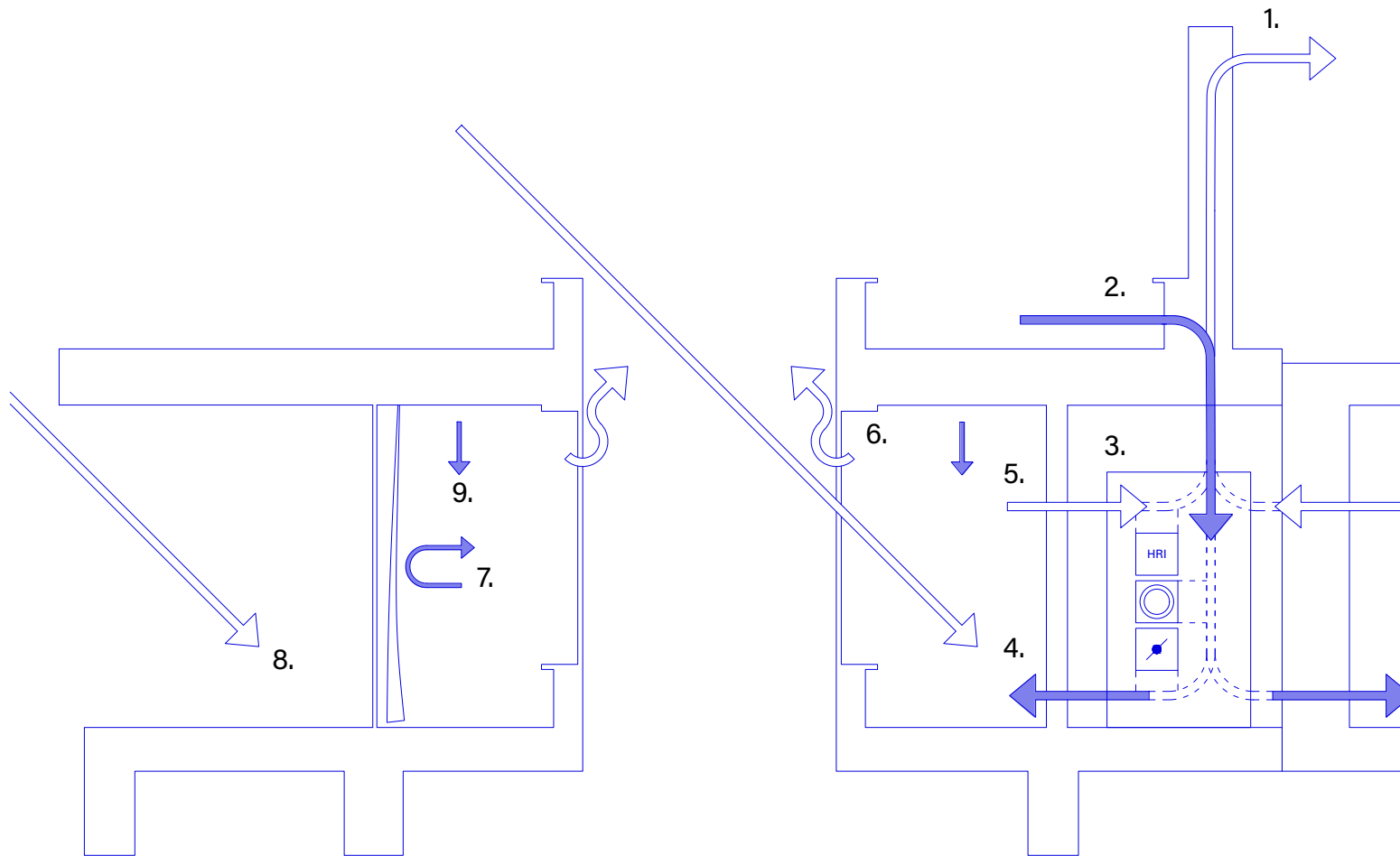
5. steel element: UMP 160 steel isolated frame, attached to main construction elements, finished with bricks on the interiors and aluminum cladding on the exterior.

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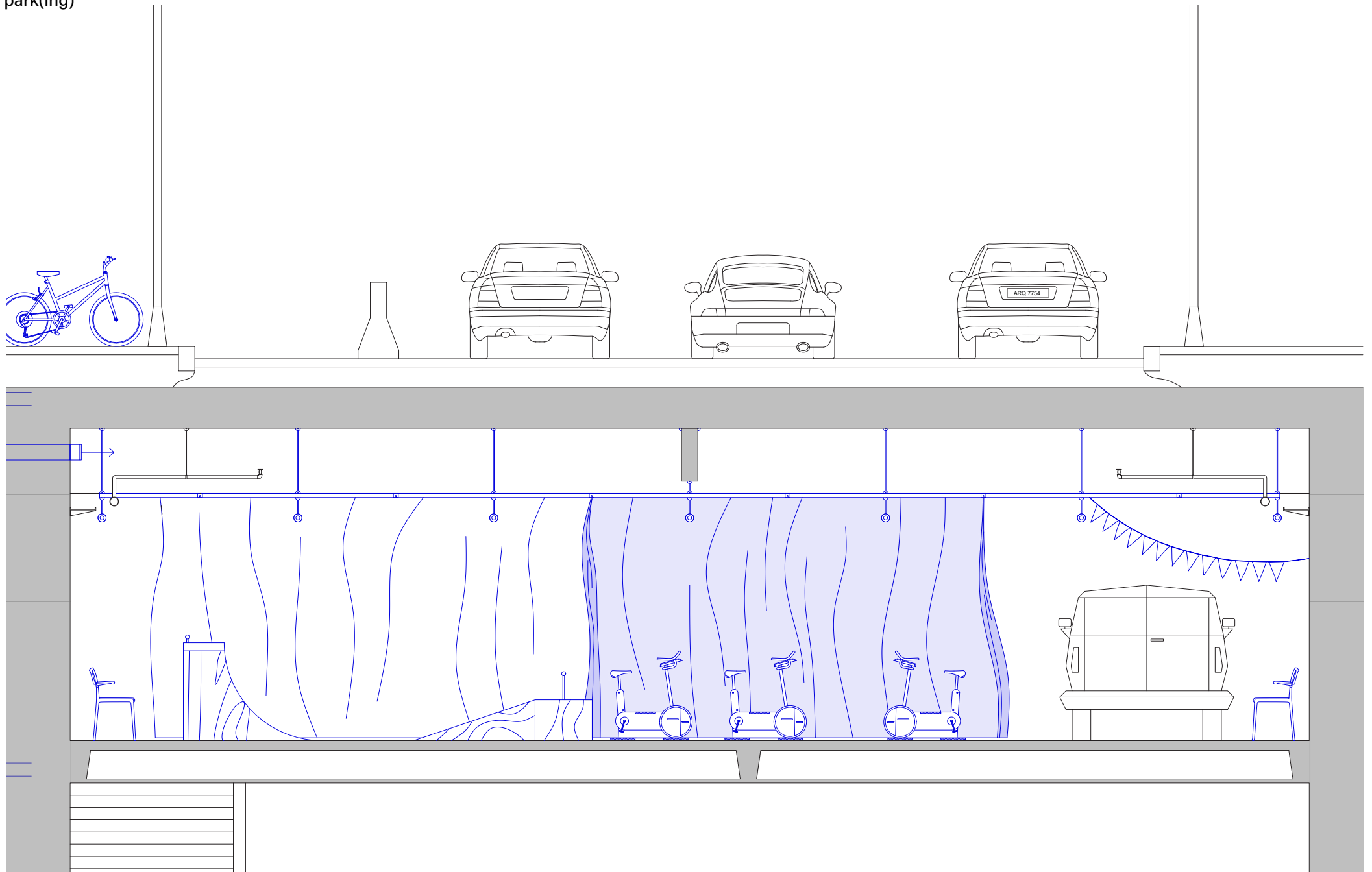
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project intervention
community center



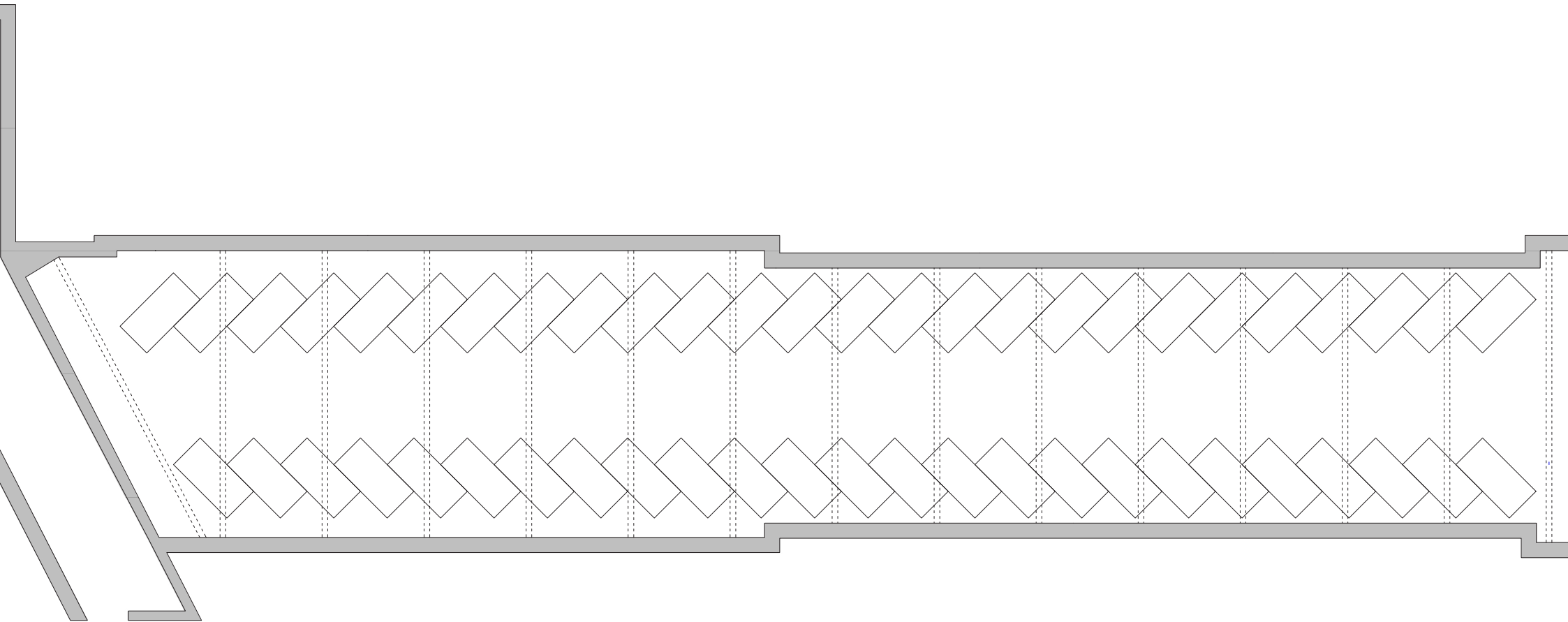
1. mechanical air outlet
2. mechanical air inlet
3. air supply and exhaust box with heat heat recovery installation, heat wheel, and VAV - box
4. clean, heated/ cooled air inlet to space
5. dirty/ heated air outlet to HRI installation
6. In extreme heats, patio windows can be opened
7. isolated curtains to reflect the heat/ partitioning the space.
8. recessed glass facade for heat radiation
9. thermal mass for heat storage

project intervention
park(ing)



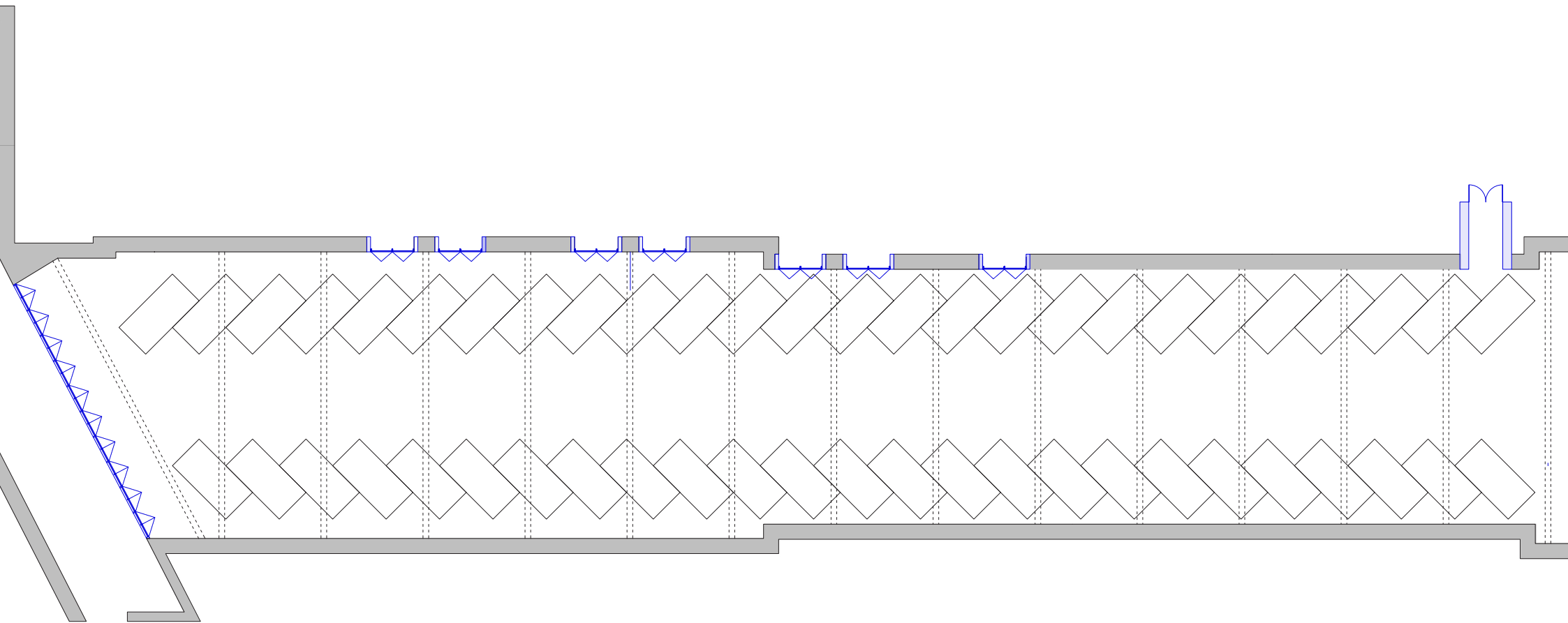
section 1.20

project intervention
park(ing)

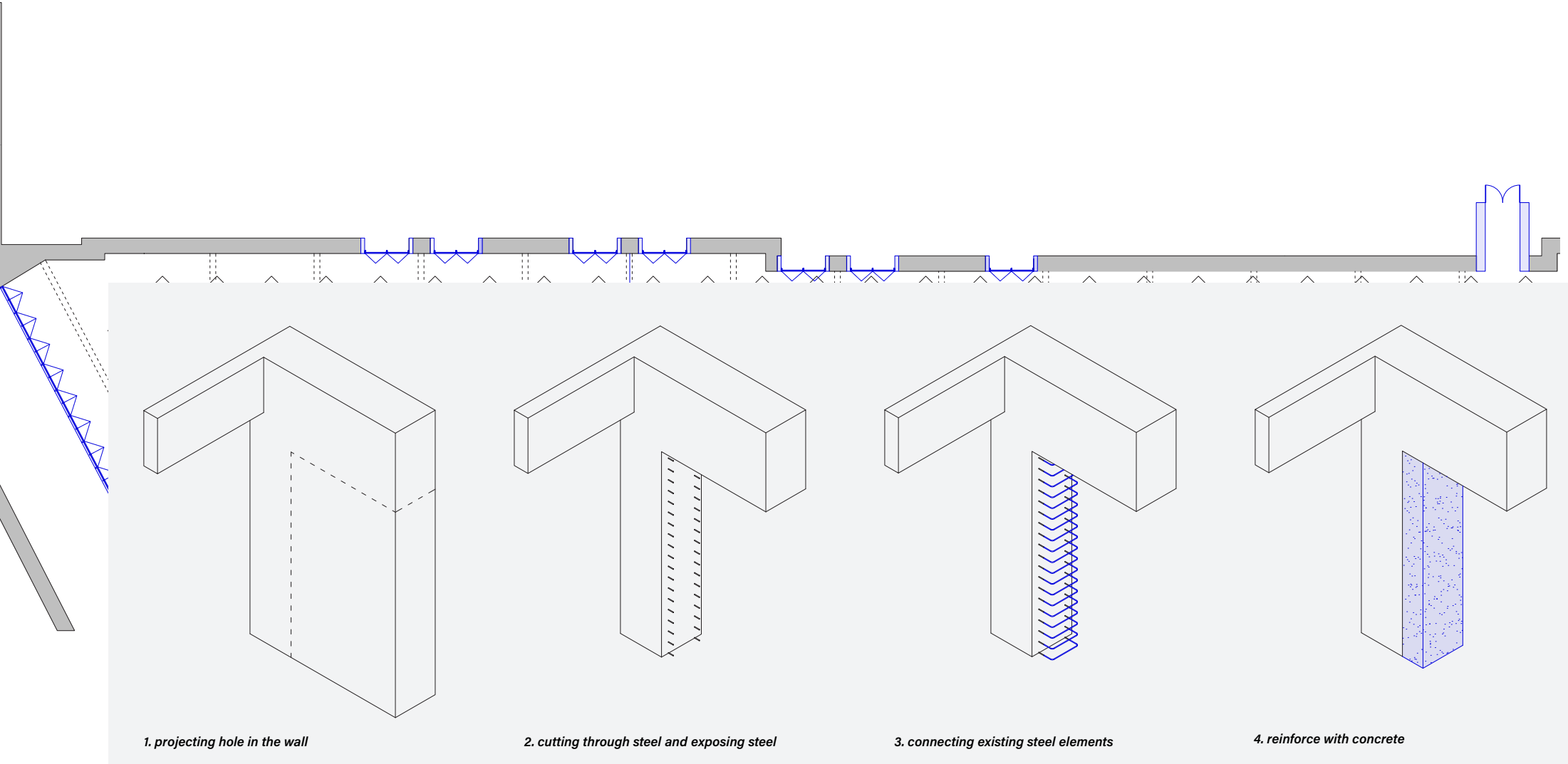


floorplan 1:100

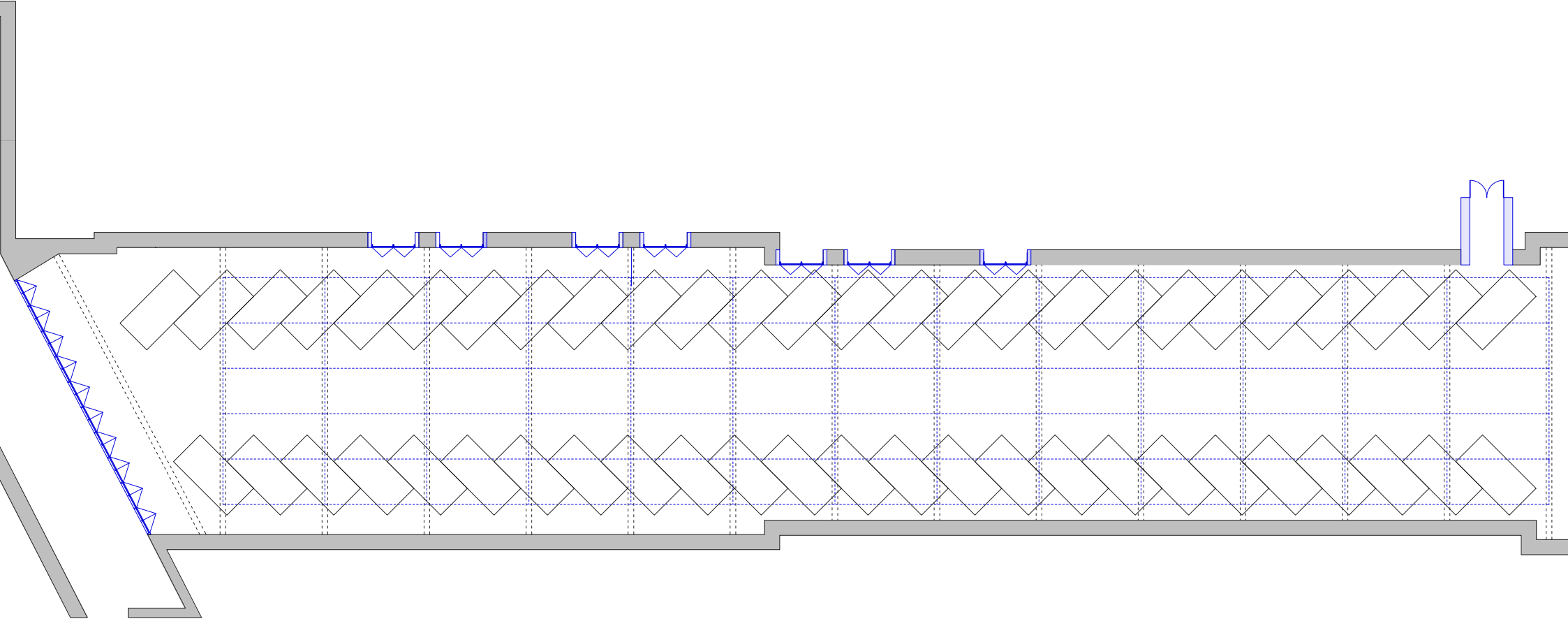
project intervention
park(ing)



floorplan 1:100

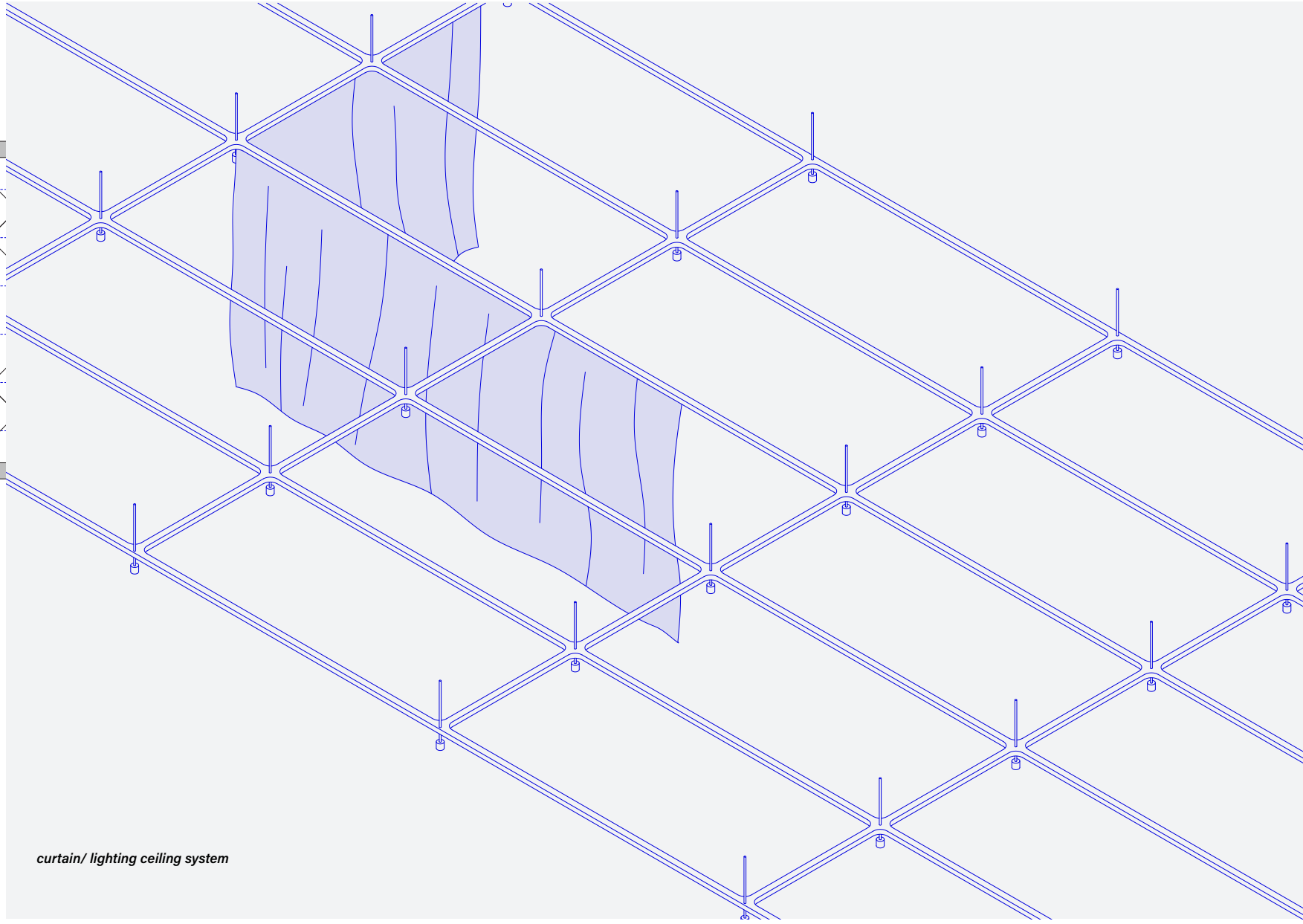
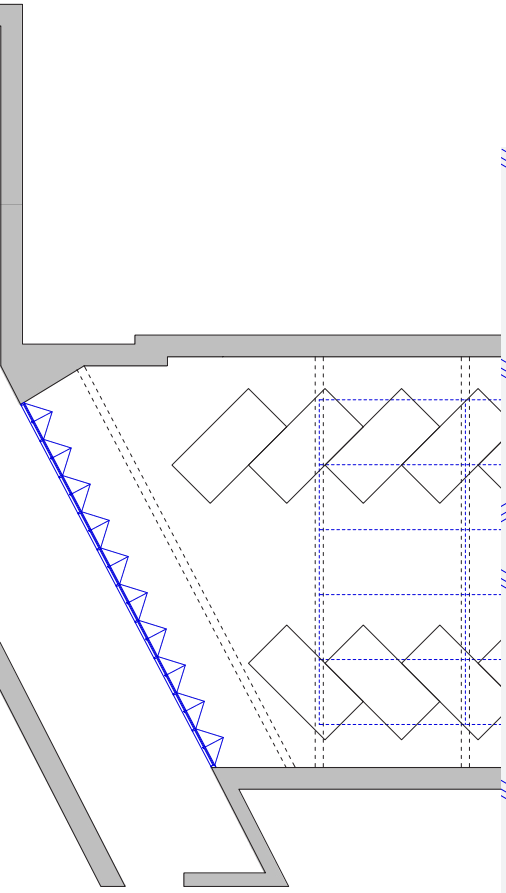


project intervention
park(ing)



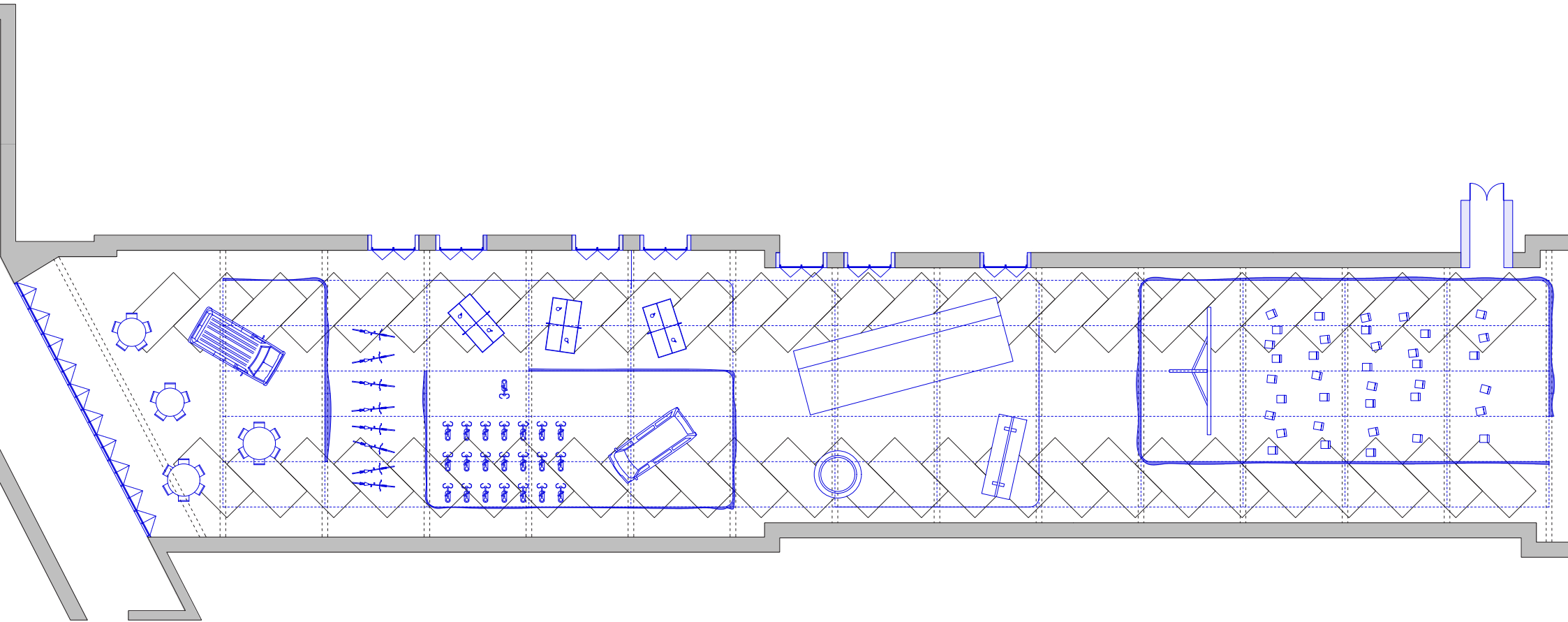
floorplan 1:100

project intervention
park(ing)



floorplan 1:100

curtain/ lighting ceiling system



project intervention
park(ing)



project intervention
section Wetstraat - Jacques de Lalaingstraat

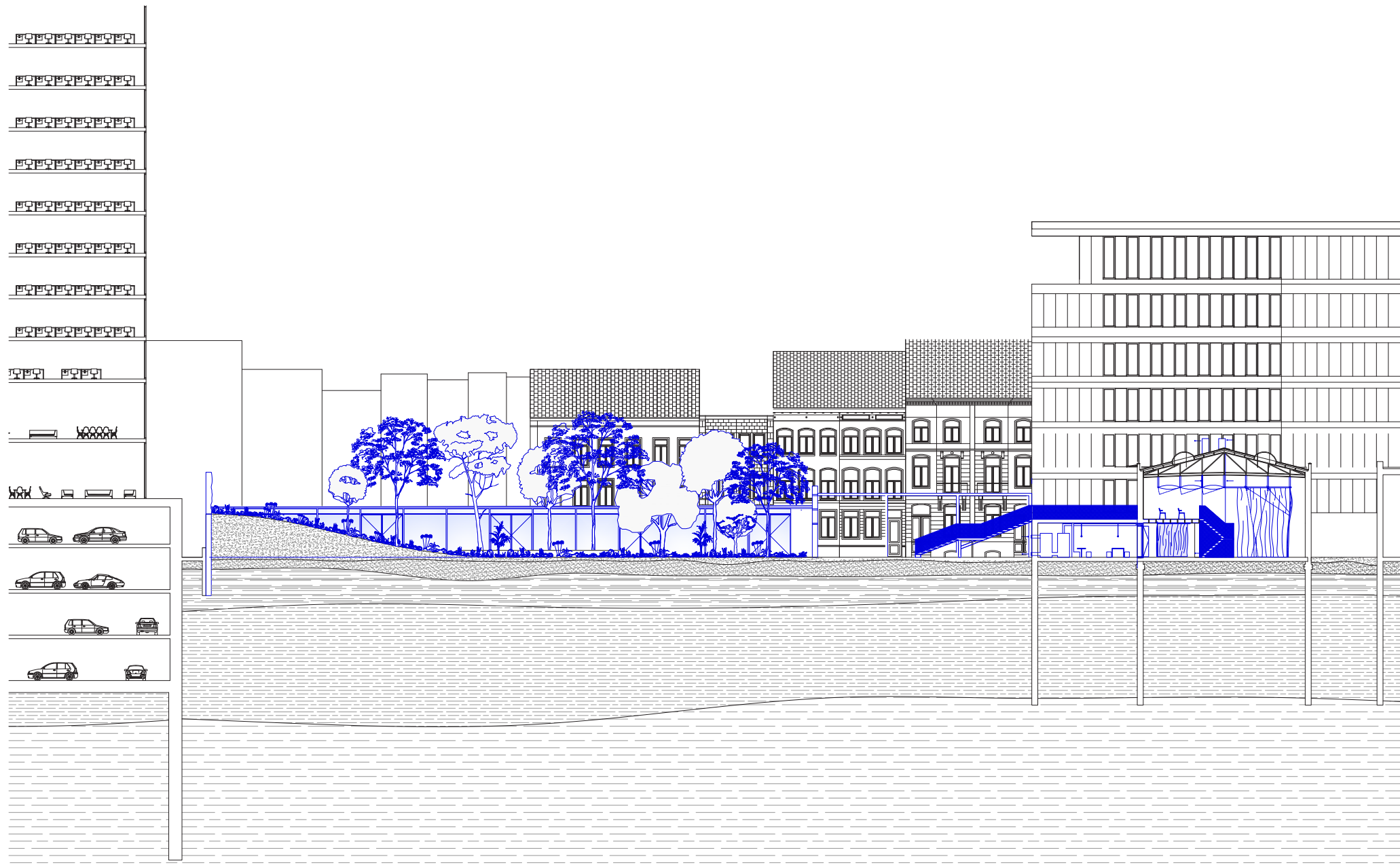


section 1.200

project intervention
view on wall - garden

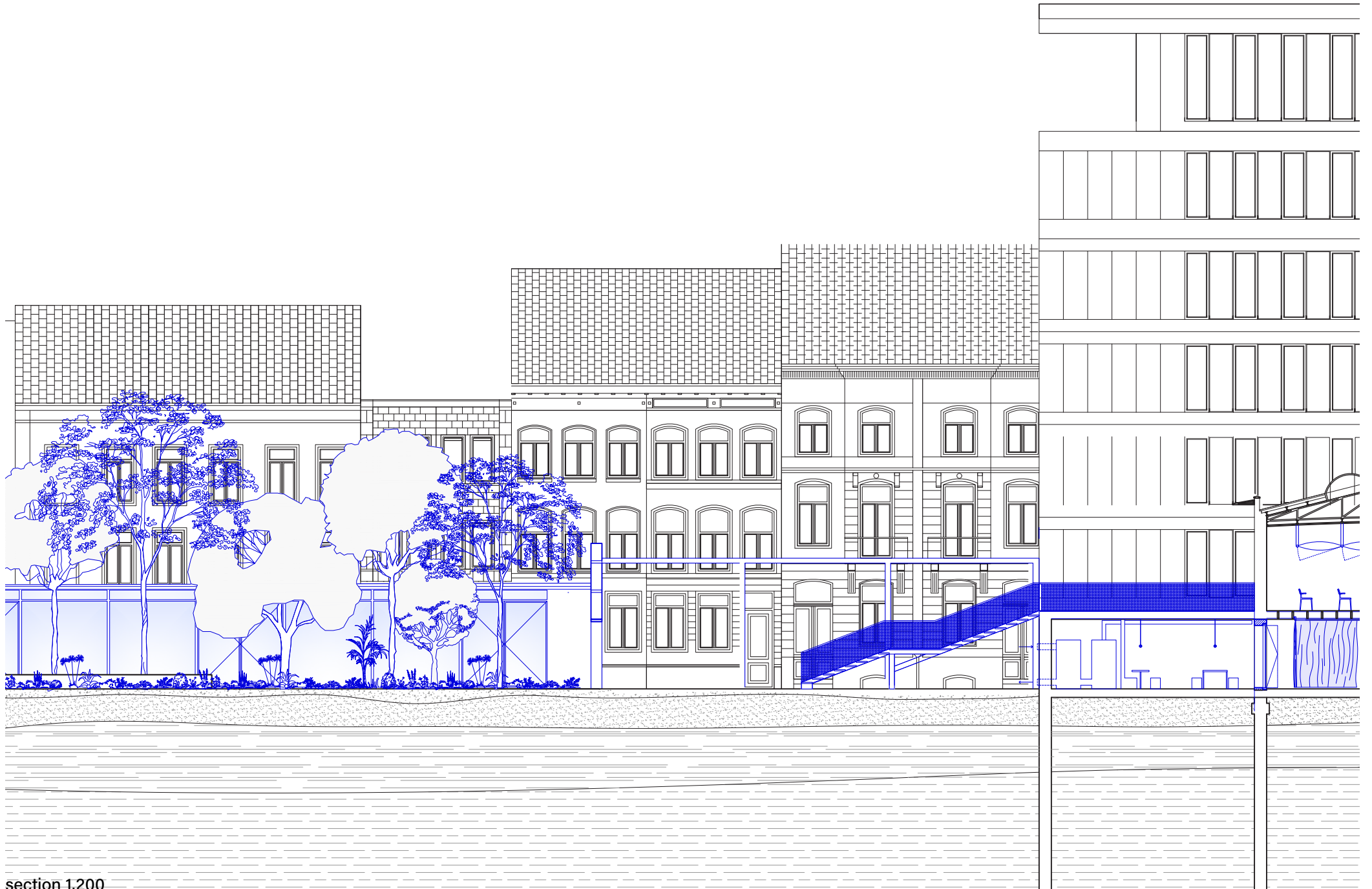


project intervention
section Wetstraat 95 - 107



section 1.200

project intervention
section Wetstraat 95 - 107

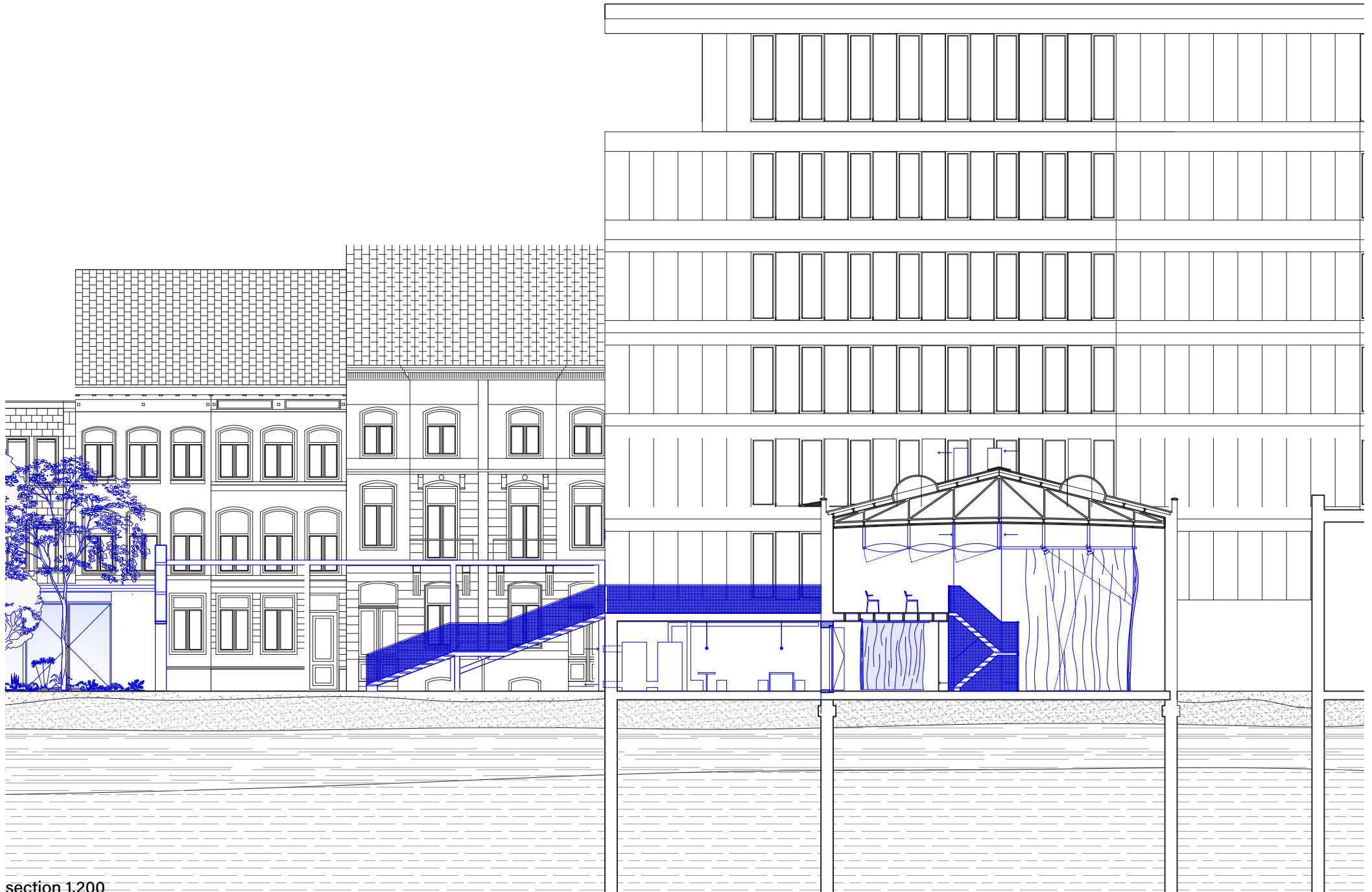


section 1.200

project intervention
view on wall - garden

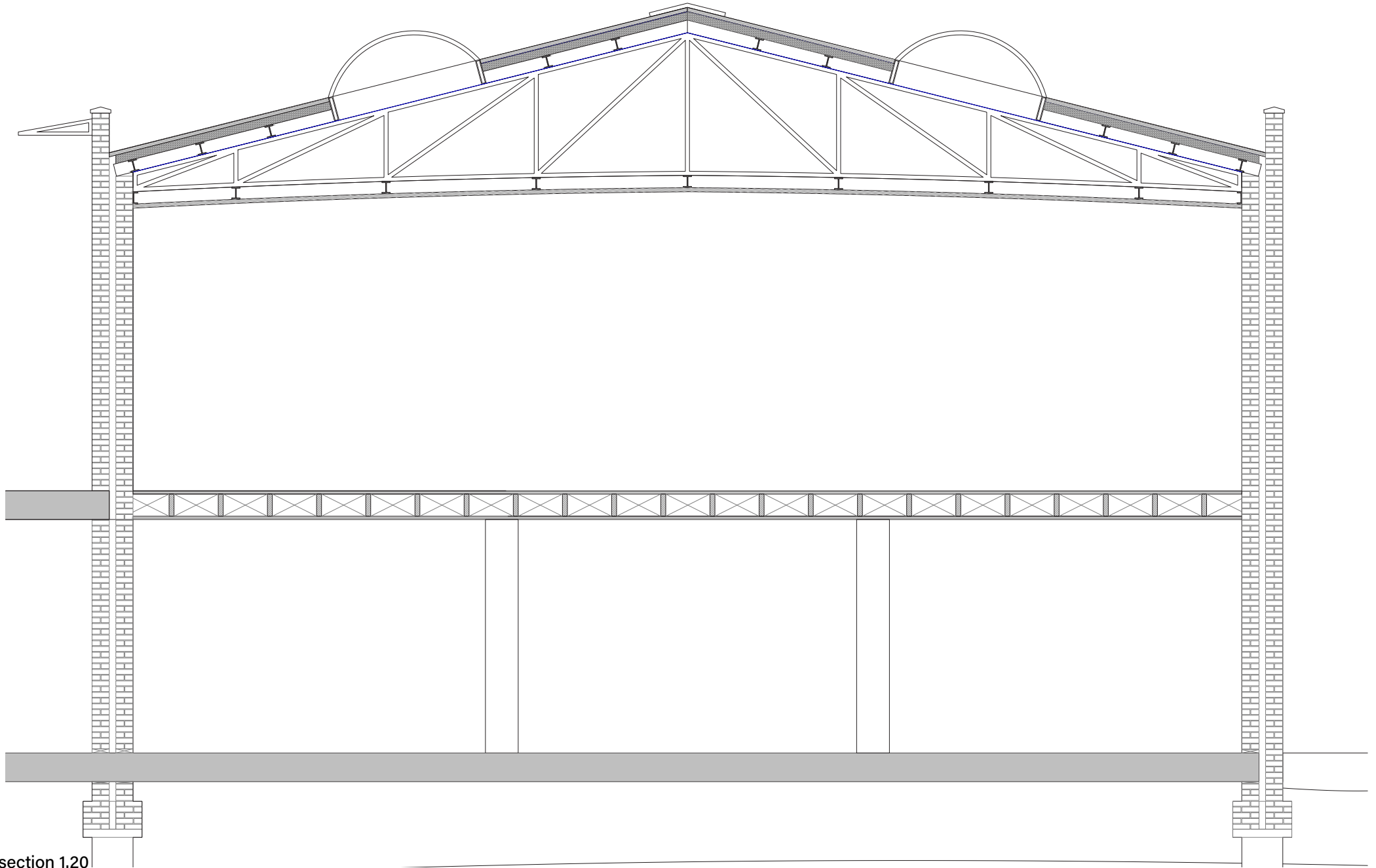


project intervention
section Wetstraat 95 - 107



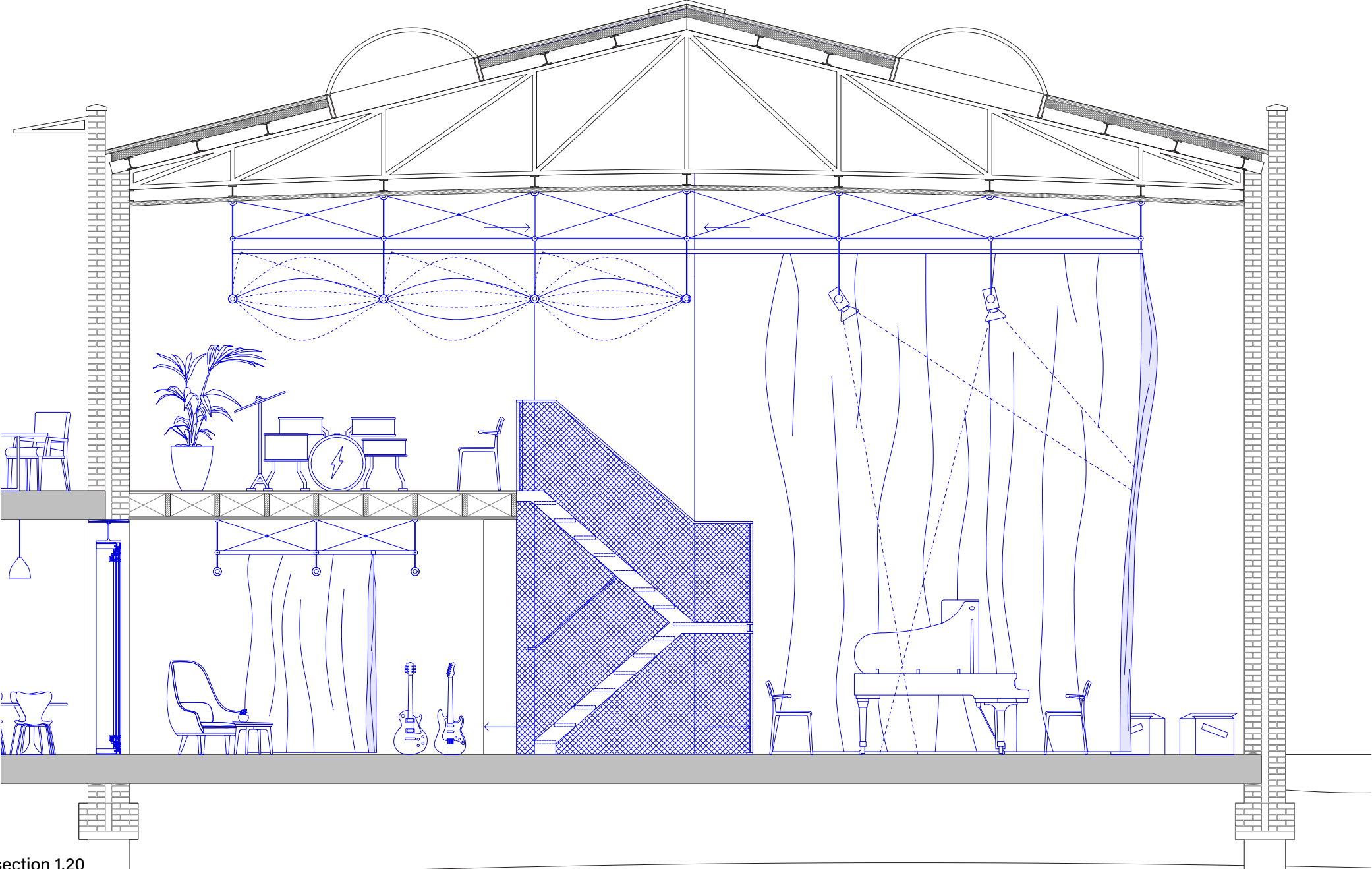
section 1.200

project intervention
theather shed - existing situation



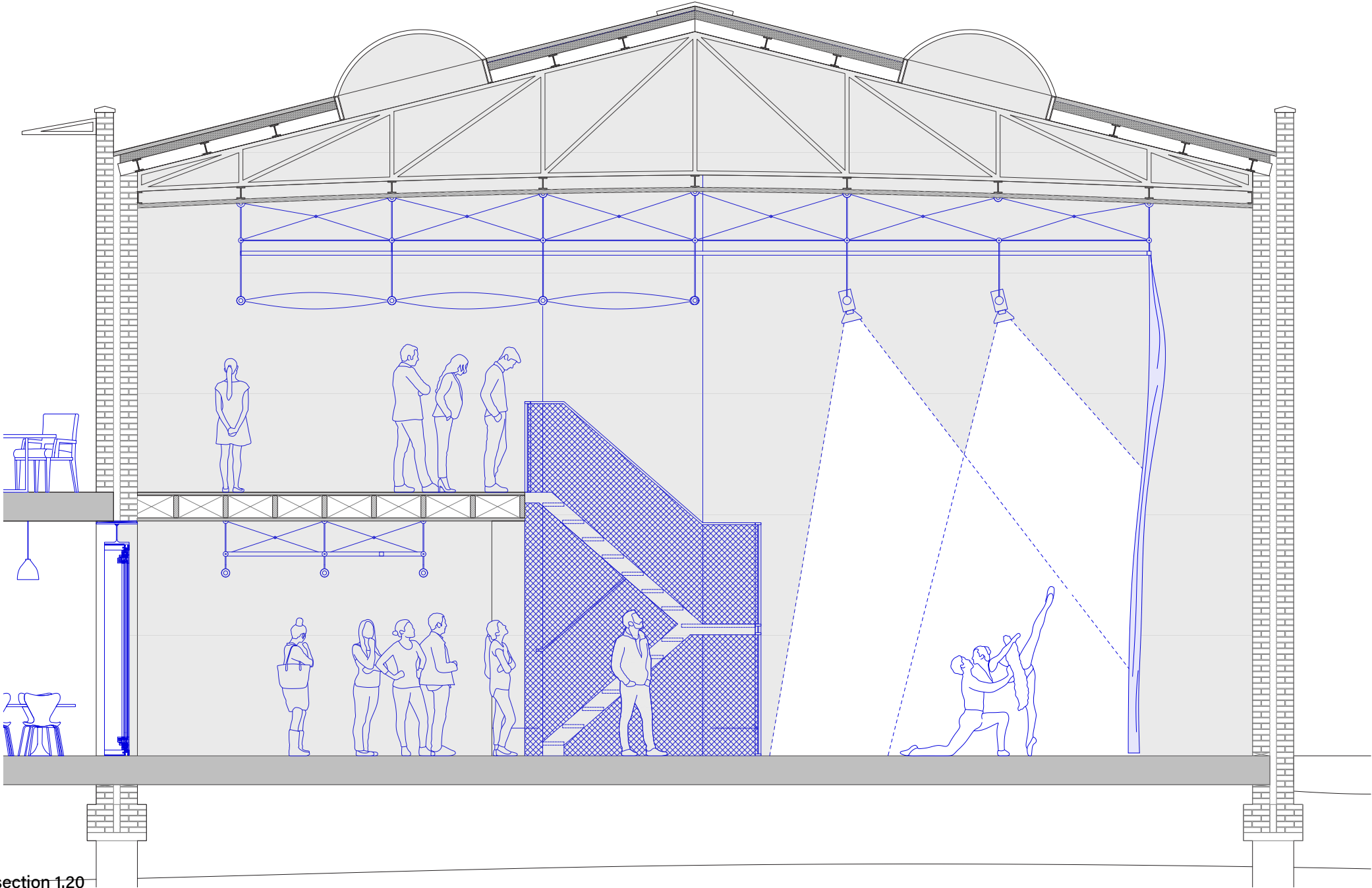
section 1.20

project intervention
theater shed



section 1.20

project intervention
theater shed

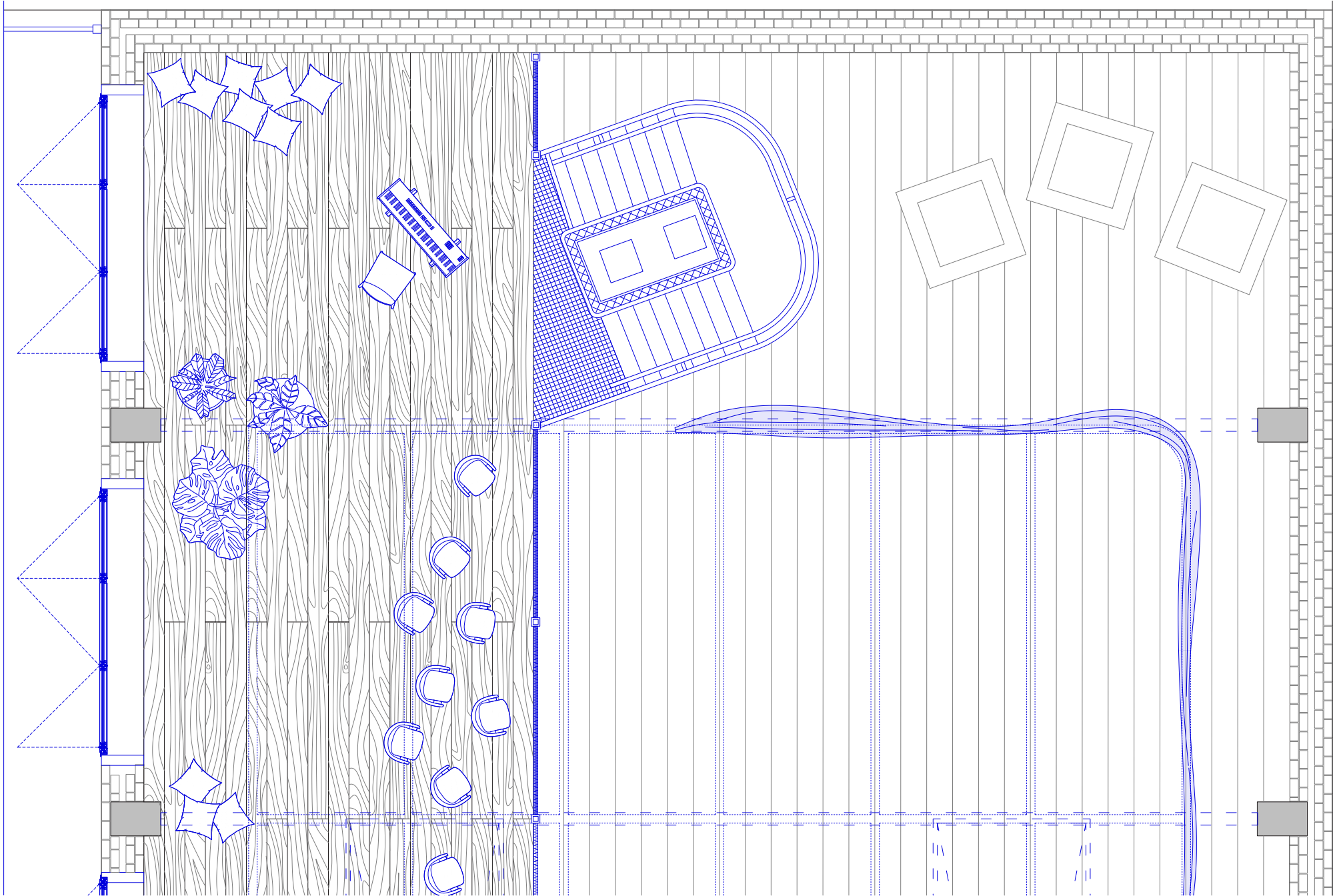


section 1.20

project intervention
theater shed



project intervention
theater shed

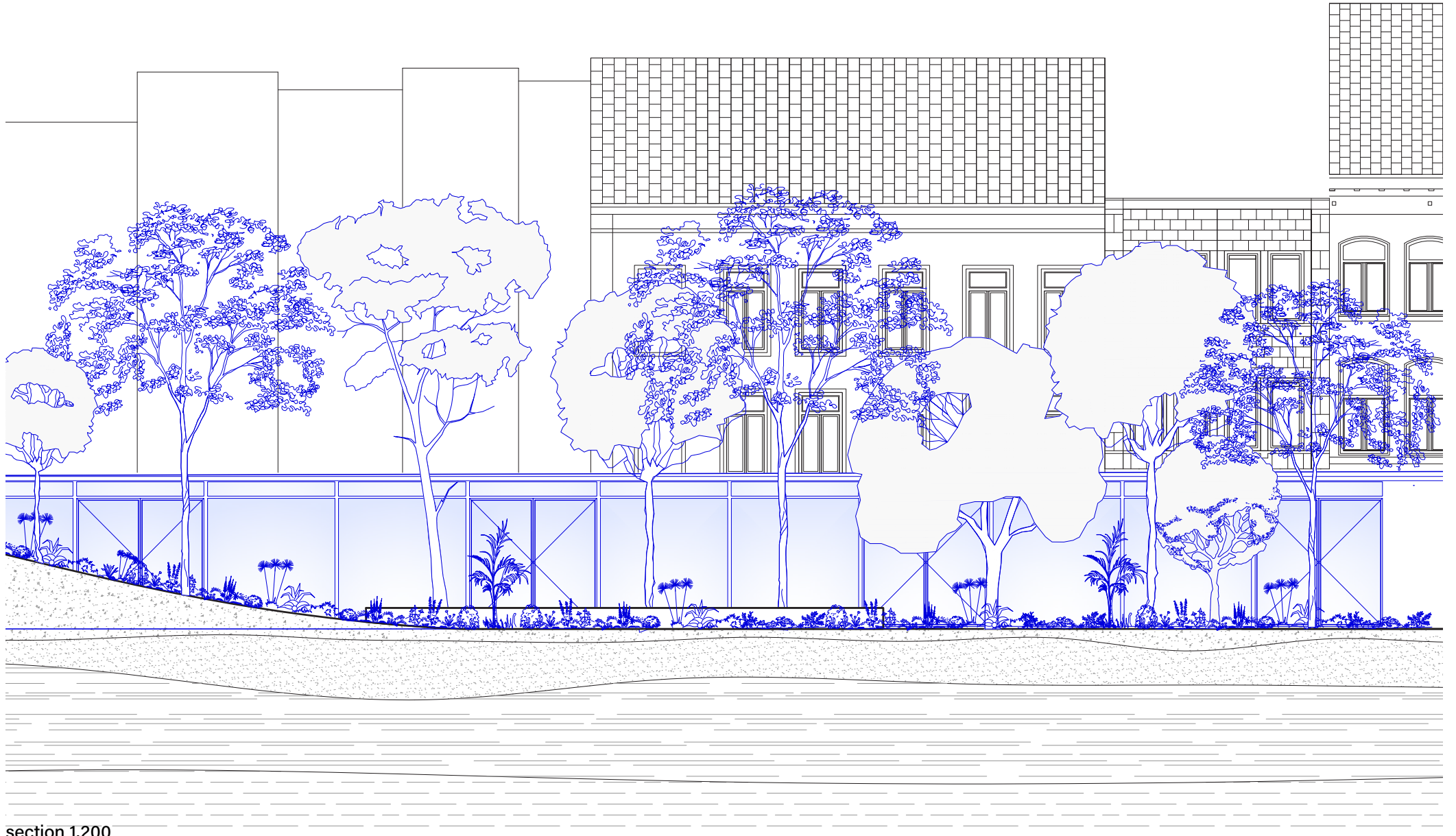


floorplan 1.20

project intervention
theater shed



project intervention
section Wetstraat 95 - 107



section 1.200

project intervention
view on glasshouse - housing



model 1.100

defining terrain vague as a walled garden

thank you

special thanks to:

Mark Pimlott
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Janne Voskuil

Dirco Kok